



STIC Search Report

EIC 1700

STIC Database Tracking Number: 116630

TO: Eisa Elhilo
Location: REMSEN 10A54
Art Unit : 1751
March 16, 2004

Case Serial Number: 09/622665

From: Kathleen Fuller
Location: EIC 1700
REMSSEN 4B28
Phone: 571/272-2505
Kathleen.Fuller@uspto.gov

Search Notes



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 1713
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28



=> FILE REG

FILE 'REGISTRY' ENTERED AT 15:27:15 ON 16 MAR 2004
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STRUCTURE FILE UPDATES: 15 MAR 2004 HIGHEST RN 663595-21-9
DICTIONARY FILE UPDATES: 15 MAR 2004 HIGHEST RN 663595-21-9

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 15:27:19 ON 16 MAR 2004
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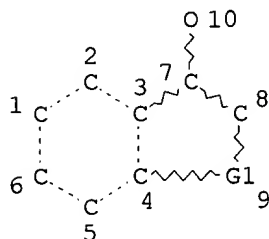
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FILE COVERS 1907 - 16 Mar 2004 VOL 140 ISS 12
FILE LAST UPDATED: 15 Mar 2004 (20040315/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> D QUE

L40 1 SEA FILE=HCAPLUS ABB=ON FR98-16379/PRN
L42 STR



27,895 structures from
this query

VAR G1=O/S/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L44 27895 SEA FILE=REGISTRY SSS FUL L42

L45 14247 SEA FILE=HCAPLUS ABB=ON L44

L47 103 SEA FILE=HCAPLUS ABB=ON L45(L) HAIR(L) DYE?

L48 48 SEA FILE=HCAPLUS ABB=ON L47 AND COMPOSITION?

L49 1 SEA FILE=HCAPLUS ABB=ON L40 AND L48

=> D L48 ALL HITSTR 1-48

48 CA references with
utility

L48 ANSWER 1 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:875078 HCAPLUS

DN 139:354146

ED Entered STN: 07 Nov 2003

TI Oxidative hair dye **compositions** containing aliphatic or aromatic aldehydes for enhancing color intensity and accelerating the dyeing process

IN Muerner, Hansruedi; Javet, Manuela; Le Cruer, Dominique

PA Wella Aktiengesellschaft, Germany

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003090700	A1	20031106	WO 2002-EP14113	20021212
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

DE 10218588 A1 20031106 DE 2002-10218588 20020426

PRAI DE 2002-10218588 A 20020426

OS MARPAT 139:354146

AB The invention concerns oxidative hair dyes composed of developing and coupling agents; aliphatic or aromatic aldehydes are added in order to enhance the color intensity of the dyes and to shorten the dyeing process. Direct dyes can be added; hydrogen peroxide is the preferred oxidation agent. Thus a hair dye solution contained; 4-amino-3-methylphenol 0.01 mol; 3-amino-6-methylphenol 0.01 mol; EDTA disodium salt 0.3 g; ascorbic acid 0.3 g; lauryl ether sulfate 2.8 g; ethanol (96%) 8.0 g; ammonia (25%) 9.0; water to 100 g. 20 G of the dye solution was mixed upon application with 20 g 6 % hydrogen peroxide solution and 1 g of a mixture composed of 5 % acetaldehyde in ethanol and water = 1:1. The color enhancer-containing mixture resulted in a more intense color compared to the hair dye without the enhancer.

ST oxidative hair dye aldehyde color intensity dyeing acceleration

IT Aldehydes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(aliphatic; oxidative hair dye compns. containing aliphatic or aromatic aldehydes

for enhancing color intensity and accelerating the dyeing process)

IT Aldehydes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(aromatic; oxidative hair dye compns. containing aliphatic or aromatic aldehydes for

enhancing color intensity and accelerating the dyeing process)

IT Dyes

(direct; oxidative hair dye compns. containing aliphatic or aromatic

aldehydes

for enhancing color intensity and accelerating the dyeing process)

IT Hair preparations

(dyes, oxidative; oxidative hair dye compns. containing aliphatic or

aromatic

aldehydes for enhancing color intensity and accelerating the dyeing process)

IT Hair preparations

(dyes; oxidative hair dye compns. containing aliphatic or aromatic

aldehydes for

enhancing color intensity and accelerating the dyeing process)

IT Oxidizing agents

(oxidative hair dye compns. containing aliphatic or aromatic aldehydes for enhancing color intensity and accelerating the dyeing process)

IT 66-25-1, Hexanal 75-07-0, Acetaldehyde, biological studies 78-84-2, Isobutyraldehyde 80-54-6, p-tert-Butyl- α -methylhydrocinnamic aldehyde 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-57-6, 5-Aminosalicylic acid 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol 91-56-5, 2,3-Indolindione 91-68-9, 3-Diethylaminophenol 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9, 4-[Ethyl(2-hydroxyethyl)amino]aniline 93-05-0, 4-Diethylaminoaniline 95-55-6, 2-Aminophenol 95-70-5, 1,4-Diamino-2-methylbenzene 95-88-5, 1-Chloro-2,4-dihydroxybenzene 96-17-3, 2-Methylbutyraldehyde 97-96-1, 2-Ethylbutyraldehyde 99-07-0, 3-Dimethylaminophenol 99-98-9, 4-Dimethylaminoaniline 101-54-2, 4-Phenylaminoaniline 101-86-0, 2-(Phenylmethylene)octanal 103-95-7 106-23-0, 3,7-Dimethyl-6-octenal 106-50-3, 1,4-Diaminobenzene,

biological studies 107-75-5, 3,7-Dimethyl-7-hydroxyoctanal 108-45-2,
 1,3-Diaminobenzene, biological studies 110-62-3, Pentanal 111-30-8,
 Glutaraldehyde 111-71-7, Heptanal 116-26-7, 2,6,6-Trimethyl-1,3-
 cyclohexadiene-1-carboxaldehyde 120-57-0, Heliotropin 122-40-7,
 2-(Phenylmethylene)heptanal 122-78-1, Phenylethanal 123-05-7,
 2-Ethylhexanal 123-15-9, 2-Methylpentanal 123-30-8, 4-Aminophenol
 123-38-6, Propionaldehyde, biological studies 123-72-8, Butanal
 124-13-0, Octanal 137-19-9, 1,5-Dichloro-2,4-dihydroxybenzene
 141-86-6, 2,6-Diaminopyridine 150-75-4, 4-Methylaminophenol 399-95-1,
 4-Amino-3-fluoro-phenol 399-96-2, 4-Amino-2-fluoro-phenol 533-31-3,
 3,4-Methylene dioxypheol 533-73-3, 1,2,4-Trihydroxybenzene 542-78-9,
 Malondialdehyde 557-48-2, (E,Z)-2,6-Nonadienal 575-38-2,
 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 590-86-3,
 Isopentanal 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-
 methylbenzene 615-66-7, 2-Chloro-1,4-diaminobenzene 619-05-6,
 3,4-Diaminobenzoic acid 770-25-2, 3-[(2-Hydroxyethyl)amino]phenol
 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 2,5,6-Triamino-4-(1H)-
 pyrimidone 1630-11-1, 1,4-Diamino-3,5-diethylbenzene 1687-53-2,
 5-Amino-2-methoxyphenol 1953-54-4, 5-Hydroxyindole 2043-61-0,
 Cyclohexanal 2359-52-6, 4-[Di(2-hydroxyethyl)amino]-2-methylaniline
 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1,
 4-Hydroxyindole 2835-95-2, 5-Amino-2-methylphenol 2835-96-3,
 4-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6,
 4-Amino-3-methylphenol 2987-16-8, 3,3-Dimethylbutyraldehyde 3131-52-0,
 5,6-Dihydroxyindole 4221-03-8, 5-Hydroxypentanal 4318-76-7,
 2,5-Diaminopyridine 5306-96-7, 1,4-Diamino-2,3-dimethylbenzene
 5349-76-8, 2,4-Diamino-1-methoxy-5-methylbenzene 5392-40-5 5435-64-3,
 3,5,5-Trimethylhexanal 5697-02-9, 2-Methyl-1-naphthol-acetate
 5862-80-6, 4-[(2,3-Dihydroxypropyl)amino]aniline 6265-21-0,
 3-[(2-Hydroxyethyl)amino]aniline 6393-01-7, 1,4-Diamino-2,5-
 dimethylbenzene 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene
 7218-02-2, 1,4-Diamino-2,6-dimethylbenzene 7228-00-4,
 2-[(3-Hydroxyphenyl)amino]acetamide 7469-77-4, 2-Methyl-1-naphthol
 7575-35-1, 4-[Di(2-hydroxyethyl)amino]aniline 7722-84-1, Hydrogen
 peroxide, biological studies 14268-66-7, 3,4-Methylene dioxyaniline
 16251-77-7, 3-Phenylbutyraldehyde 16867-03-1, 2-Amino-3-hydroxypyridine
 17672-22-9, 2-Amino-6-methylphenol 26011-57-4, 6-Amino-3,4-dihydro-
 1,4(2H)-benzoxazine 26021-57-8, 3,4-Dihydro-6-hydroxy-1,4(2H)-
 benzoxazine 26455-21-0, N-(3-Dimethylaminophenyl)urea 28020-38-4,
 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline
 29785-47-5, 4-Amino-2-(methoxymethyl)phenol 30897-75-7, Pinoacetaldehyde
 31906-04-4 36207-16-6 39489-79-7, 5-Amino-2,4-dichlorophenol
 45514-38-3, 4,5-Diamino-1-methyl-1H-pyrazole 53222-92-7,
 3-Amino-2-methylphenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-
 methylphenol 61693-42-3, 3-Amino-2,4-dichlorophenol 66566-48-1,
 4-[(2-Methoxyethyl)amino]aniline 67199-87-5, 1,4-Diamino-2-
 aminomethylbenzene 68039-49-6, 2,4-Dimethyl-3-cyclohexenecarboxaldehyde
 70643-19-5, 2,4-Diamino-1-(2-hydroxyethoxy)benzene 71077-37-7,
 1,3-Diamino-4-(2-methoxyethoxy)benzene 71500-41-9, 4-Amino-2-di[(2-
 hydroxyethyl)amino]-1-ethoxybenzene 71500-42-0, 3-[Di(2-
 hydroxyethyl)amino]aniline 73793-80-3, 1,4-Diamino-2-
 dihydroxymethylbenzene 75513-65-4, 1,3-Diamino-4-(2,3-
 dihydroxypropoxy)benzene 76045-64-2, 3-[(2-Aminoethyl)amino]aniline
 78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene 79352-72-0,
 4-Amino-2-(aminomethyl)phenol 80592-80-9, 3-[(2,3-Dihydroxypropyl)amino]-
 2-methylphenol 80592-81-0, 3-[(2-Hydroxyethyl)amino]-2-methylphenol
 81329-90-0, 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxol 81892-72-0,
 1,3-Di(2,4-diaminophenoxy)propane 83763-47-7, 2-Amino-4-[(2-

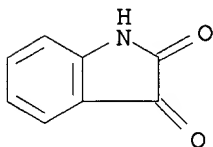
hydroxyethyl)amino]aniso 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine 84540-48-7, 2,4-Diaminophenoxy acetic acid 84540-50-1, 3-Amino-2-chloro-6-methylphenol 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 86817-42-7, 2-(4-Amino-2-hydroxyphenoxy)ethanol 90817-34-8 93841-24-8, 1,4-Diamino-2-(2-hydroxyethyl)benzene 94082-77-6, 2,4-Diamino-1,5-di(2-hydroxyethoxy)benzene 97902-52-8, 1,4-Diamino-2-(1-methylethyl)benzene 104333-08-6, 4-Amino-2-(2-hydroxyethyl)phenol 104333-09-7, 4-Amino-2-(hydroxymethyl)phenol 104752-48-9, 4-[(3-Hydroxypropyl)amino]aniline 104752-50-3, 1-(2-Aminoethoxy)-2,4-diaminobenzene 104752-51-4, 1,2-Dichloro-3,5-dihydroxy-4-methylbenzene 105293-89-8, 4-Dipropylaminoaniline 109942-17-8, 2,5-Diaminobiphenyl 110102-86-8, 5-Amino-4-chloro-2-methylphenol 110952-46-0, 4-Amino-2-[(2-hydroxyethyl)amino]methylphenol 111451-24-2, 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-methylphenol 122481-67-8, 2,4-Di[(2-hydroxyethyl)amino]-1,5-dimethoxybenzene 125109-85-5, 3-(3-Isopropylphenyl)butanal 126335-43-1, 1,4-Diamino-2-(2-hydroxyethoxy)benzene 128729-30-6, 1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-propanol 130582-53-5, 1,4-Bis[(4-aminophenyl)amino]butane 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 137290-86-9, 5-[(2-Hydroxyethyl)amino]-4-methoxy-2-methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol 141614-04-2, 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3, 2,4-Diamino-1-(2-hydroxyethoxy)-5-methylbenzene 141922-20-5, 2,4-Diamino-1-fluoro-5-methylbenzene 142082-56-2, 3-[(2-Methoxyethyl)amino]phenol 146658-65-3, 5-[(3-Hydroxypropyl)amino]-2-methylphenol 149330-25-6, 2,6-Bis(2-hydroxyethyl)aminotoluene 155601-16-4, 4,5-Diamino-1-(1-methylethyl)-1H-pyrazole 155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)-1H-pyrazole 157469-54-0, 4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-pyrazole 157469-55-1, 1-[(4-Chlorophenyl)methyl]-4,5-diamino-1H-pyrazole 159661-45-7, 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane 168092-23-7, Di(2,4-diaminophenoxy)methane 168202-61-7, 4-Amino-3-(hydroxymethyl)phenol 207568-58-9, 2-[2-(Acetylamino)ethoxy]-1,4-diaminobenzene 207923-07-7, 5-Amino-2-ethylphenol 244104-61-8, 1,4-Diamino-2-(thiophen-2-yl)benzene 246244-41-7, 1,4-Diamino-2-(thiophen-3-yl)benzene 306959-12-6, 1,4-Diamino-2-(pyridin-3-yl)benzene 307493-94-3, 1,3-Diamino-4-(3-hydroxypropoxy)benzene 329320-36-7, 1,4-Diamino-2-(1-hydroxyethyl)benzene 337906-36-2, 1,4-Diamino-2-methoxymethylbenzene 364328-20-1

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative **hair dye** compns. containing aliphatic or aromatic aldehydes for enhancing color intensity and accelerating the **dyeing** process)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Cotteret, J; WO 02051373 A 2002 HCAPLUS
- (2) Henkel Kgaa; DE 19717224 A 1998 HCAPLUS
- (3) Henkel Kgaa; DE 19717280 A 1998 HCAPLUS
- (4) Henkel Kgaa; DE 19810887 A 1999 HCAPLUS
- (5) Henkel Kgaa; DE 10048922 A 2002 HCAPLUS
- (6) Kinney, J; US 3904357 A 1975 HCAPLUS
- (7) Nelles, K; WO 0222092 A 2002 HCAPLUS
- (8) Shiseido Co; JP 63243020 A 1988 HCAPLUS
- (9) Thompson, J; ANAL CHEM 1984, V56, P2834 HCAPLUS
- (10) Umbach, W; Kosmetik - Entwicklung, Herstellung und Anwendung kosmetischer Mittel 1988, P287
- (11) Wenke, G; US 5034014 A 1991 HCAPLUS

IT **91-56-5**, 2,3-Indolindione
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative **hair dye** compns. containing aliphatic or aromatic
 aldehydes for enhancing color intensity and accelerating the
dyeing process)
 RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 2 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:798405 HCAPLUS
 DN 139:311934
 ED Entered STN: 12 Oct 2003
 TI Hair **compositions** containing oxidation dye and an agent limiting
 the transcutaneous absorption of dyes
 IN Dreher, Frank; Pruche, Francis
 PA L'Oreal, Fr.
 SO Fr. Demande, 41 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2838053	A1	20031010	FR 2002-4427	20020409
	EP 1352635	A2	20031015	EP 2003-290873	20030408
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2004040097	A1	20040304	US 2003-409570	20030409
PRAI	FR 2002-4427	A	20020409		
	US 2002-372817P	P	20020417		
OS	MARPAT 139:311934				

AB A hair **composition** contains an oxidation (orthodiphenol type) and an
 agent limiting the transcutaneous absorption of the dye and a system
 comprising salts and oxides of Mn (II) and/or Zn (II) and their mixts. and
 a second component chosen from alkaline hydrogen carbonates, alkaline-earth
 hydrogen carbonates and their mixts. The ratio of e.g., the Mn salt to
 the hydrogen carbonate is chosen to be 10-4-<1. Thus, a solution containing 1

mM
 MnCl₂ in 1M NaHCO₃ was added to an aqueous solution of 5,6-dihydroxyindole and
 applied on the skin. The penetration of the indole across the skin was
 reduced by the solution containing MnCl₂ and NaHCO₃.

ST hair dye transcutaneous absorption manganese salt; bicarbonate hair dye
 oxidn manganese salt

IT Aglycons
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (anthocyanidins; hair compns. containing oxidation dye and agent limiting
 the

transcutaneous absorption of dyes)

IT Hair preparations
 (dyes; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Apple
 Banana (Musa)
 Fruit
 Potato (Solanum tuberosum)
 Raisin
 Tea (Camellia sinensis)
 Vegetable
 (exts.; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Antibacterial agents
 Skin
 (hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Alcohols, biological studies
 Amino acids, biological studies
 Anthocyanins
 Bicarbonates
 Enzymes, biological studies
 Ethers, biological studies
 Flavanols
 Glycols, biological studies
 Hydroquinones
 Proteins
 Quinones
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Carboxylic acids, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hydroxy, salts; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Flavones
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hydroxy; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Aglycons
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (iridoid; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Embryophyta
 (medicinal plant, exts.; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Phenols, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (naphthols; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Carboxylic acids, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (salts; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

IT Carboxylic acids, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (zinc salts; hair compns. containing oxidation dye and agent limiting the transcutaneous absorption of dyes)

transcutaneous absorption of dyes)

IT 51-17-2D, Benzimidazole, derivs. 52-90-4, Cysteine, biological studies
 52-90-4D, Cysteine, derivs. 54-96-6, 3,4-Pyridinediamine 59-92-7,
 3,4-Dihydroxyphenylalanine, biological studies 59-92-7D,
 3,4-Dihydroxyphenylalanine, derivs. 67-64-1, Acetone, biological studies
 67-68-5, DMSO, biological studies 70-18-8, Glutathione, biological
 studies 70-18-8D, Glutathione, derivs. 90-15-3, α -Naphthol
 91-22-5D, Quinoline, derivs. 95-16-9D, Benzothiazole, derivs. 95-54-5,
 o-Phenylenediamine, biological studies 95-55-6, o-Aminophenol 95-70-5
 95-88-5, 4-Chloro-1,3-dihydroxybenzene 106-50-3, p-Phenylenediamine,
 biological studies 108-26-9 108-45-2, 1,3-Diaminobenzene, biological
 studies 108-45-2D, m-Phenylenediamine, derivs. 108-46-3,
 1,3-Dihydroxybenzene, biological studies 110-86-1D, Pyridine, derivs.
 123-30-8, p-Aminophenol 144-55-8, Carbonic acid monosodium salt,
 biological studies 271-44-3D, Indazole, derivs. 273-53-0D,
 Benzoxazole, derivs. 274-09-9D, 1,3-Benzodioxole, derivs. 288-13-1D,
 Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs. 298-14-6 399-95-1,
 4-Amino-3-fluorophenol 533-31-3, Sesamol 533-31-3D, Sesamol, derivs.
 591-27-5, 3-Aminophenol 591-27-5D, m-Aminophenol, derivs. 608-25-3,
 1,3-Dihydroxy-2-methylbenzene 612-76-0D, m-Diphenol, derivs. 615-66-7
 872-50-4, N-Methylpyrrolidone, biological studies 1004-74-6,
 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-
 triaminopyrimidine 1314-13-2, Zinc oxide, biological studies
 1344-43-0, Manganese (II) oxide, biological studies 1630-11-1
 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2,
 2-Methyl-5-aminophenol 2835-96-3 2835-98-5 2835-99-6,
 4-Amino-3-methylphenol 3131-52-0, 5,6-Dihydroxyindole 3131-52-0D,
 5,6-Dihydroxyindole, derivs. 3240-72-0 3546-50-7, 2,4,5-
 Pyrimidinetriamine 4318-76-7, 2,5-Diaminopyridine 4664-16-8,
 2,6-Dihydroxy-4-methylpyridine 4770-37-0, 6-Hydroxyindoline 4790-08-3
 5306-96-7 **5638-85-7**, 1H-Indole-2,3-diol **5638-85-7D**,
 1H-Indole-2,3-diol, derivs. 7218-02-2 7439-96-5D, Manganese, salts
 7440-66-6D, Zinc, salts 7556-37-8, 4-Hydroxy-N-methylindole 7575-35-1
 7646-85-7, Zinc chloride (ZnCl₂), biological studies 7773-01-5,
 Manganese (II) chloride 9001-05-2, Catalase 9001-37-0, Glucose oxidase
 9001-96-1, Pyruvate oxidase 9002-10-2, Tyrosinase 9002-12-4, Uricase
 9003-99-0, Peroxidase 9028-67-5, Choline oxidase 9028-72-2, Lactate
 oxidase 9029-22-5, Sarcosine oxidase 9054-89-1, Superoxide dismutase
 16461-98-6, 1H-Pyrazole-3,4-diamine 16867-03-1, 2-Amino-3-
 hydroxypyridine 17672-22-9 19735-89-8, 1-Phenyl-3-methylpyrazol-5-one
 22715-34-0 27323-69-9D, Dihydroxycinnamic acid, derivs. 28020-38-4
 28900-64-3, 2,3,-Dihydroxyphenylalanine 28900-64-3D,
 2,3,-Dihydroxyphenylalanine, derivs. 29785-47-5 30569-52-9,
 3,6-Dimethylpyrazolo[3,2-c]1,2,4-triazole 37250-80-9, Pyranose oxidase
 39455-90-8D, Pyrazolone, derivs. 41010-68-8 43070-85-5D,
 Hydroxycoumarin, derivs. 45514-38-3, 4,5-Diamino-1-methylpyrazole
 46160-00-3 50322-90-2D, Hydroxychalcone, derivs. 52943-88-1
 55302-96-0 56685-04-2D, Hydroxycoumarone, derivs. 60772-49-8D,
 Hydroxyxanthone, derivs. 63969-43-7 65308-63-6D, Hydroxychromone,
 derivs. 69151-32-2 69669-73-4, Glycerol oxidase 70643-19-5
 79352-72-0 80498-15-3, Laccase 80619-01-8, Bilirubin oxidase
 81892-72-0 83763-47-7 93841-24-8 93846-05-0 96886-30-5
 97902-52-8, 2-Isopropyl-p-phenylenediamine 104333-09-7 110952-46-0
 118020-67-0, 1H-Pyrazole-3,4,5-triamine 126335-43-1 128729-30-6
 128729-31-7 129697-50-3 130582-53-5 132026-21-2 132026-22-3
 132026-42-7 135855-34-4 135855-35-5 145441-19-6 155601-17-5
 157469-55-1 168202-61-7 184172-85-8 184172-97-2 184172-99-4
 184173-00-0 184173-01-1 184173-02-2 184173-03-3 184173-43-1

184173-45-3 184173-47-5 191731-06-3 191731-07-4 191731-08-5
 201599-12-4, Pyrazolo[1,5-a]pyrimidine-3,7-diamine 201599-15-7
 201599-16-8, Pyrazolo[1,5-a]pyrimidine-3,5-diamine 201599-17-9
 201599-18-0 201599-20-4 201599-21-5 201599-23-7 201599-24-8
 201599-25-9 201599-26-0 201599-27-1 221110-58-3 267407-85-2
 412029-30-2, 1H-Indole-4,5-diol 412029-30-2D, 1H-Indole-4,5-diol,
 derivs. 412029-31-3, 1H-Indole-6,7-diol 412029-31-3D,
 1H-Indole-6,7-diol, derivs. 412050-23-8D, Hydroxyisocoumarin, derivs.
 612057-46-2D, Isobenzofuranol, derivs.

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair compns. containing oxidation dye and agent limiting
 the transcutaneous absorption of dyes)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

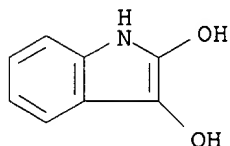
- (1) Bristol Myers Co; GB 2132642 A 1984 HCAPLUS
- (2) Bristol Myers Co; EP 0342034 A 1989 HCAPLUS
- (3) Lion Corp; JP 01319411 A 1989 HCAPLUS
- (4) Oreal; EP 0697210 A 1996 HCAPLUS
- (5) Oreal; EP 1210931 A 2002 HCAPLUS
- (6) Oreal; FR 2814943 A 2002 HCAPLUS
- (7) Prota, G; US 5279618 A 1994 HCAPLUS
- (8) Prota, G; US 5704949 A 1998 HCAPLUS
- (9) Sun Star Hamigaki K; JP 53133641 A 1978 HCAPLUS

IT 5638-85-7, 1H-Indole-2,3-diol 5638-85-7D,
 1H-Indole-2,3-diol, derivs.

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair compns. containing oxidation dye and agent limiting
 the transcutaneous absorption of dyes)

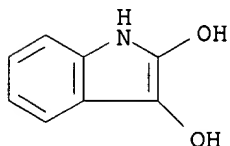
RN 5638-85-7 HCAPLUS

CN 1H-Indole-2,3-diol (9CI) (CA INDEX NAME)



RN 5638-85-7 HCAPLUS

CN 1H-Indole-2,3-diol (9CI) (CA INDEX NAME)



L48 ANSWER 3 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:559832 HCAPLUS

DN 139:122438

ED Entered STN: 22 Jul 2003

TI First compositions of oxidative hair dyes, their manufacture,
 and selection of oxidative hair dyes

IN Yagioka, Satoshi; Ezawa, Aya; Kyono, Satoshi; Machida, Shoji; Takano,

Hiroshi; Osato, Hiroyasu; Naoi, Yuki
 PA Arimino Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-13
 ICS D06P003-08
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003206219	A2	20030722	JP 2002-3316	20020110
PRAI	JP 2002-3316		20020110		

AB The 1st compns. of hair dyes are colored to have the same color tone as that of hair after dyeing. The 1st compns. can be discriminated and selected based on the color tone of the compns. A 1st **composition** containing cetanol 6.0, liquid paraffin 8.0, polyoxyethylene stearyl ether 5.0, 70% stearyltrimethylammonium chloride 1.0, polyethylene glycol 5.0, Na2SO3 0.5, p-phenylenediamine 0.8, 2,6-diaminopyridine 0.96, 2,4-diaminophenoxyethanol-HCl 0.64, Japan Blue 404 0.001, 28% aqueous NH3 8.0, and H2O to 100 weight% showed blue color. Human gray hair was dyed blue with a 1:1 mixture of the 1st **composition** and a 2nd **composition** (3% aqueous H2O2).

ST oxidative hair dye blue colorant surfactant

IT Dyes

(direct; first compns. containing colorants and surfactants for oxidative hair dyes)

IT Hair preparations

(dyes, oxidative; first compns. containing colorants and surfactants for oxidative hair dyes)

IT Human

Surfactants

(first compns. containing colorants and surfactants for oxidative hair dyes)

IT 130-20-1, Japan Blue 204

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(Japan Blue 204; first compns. containing colorants and surfactants for oxidative hair dyes)

IT 112-03-8, Stearyltrimethylammonium chloride 147-14-8, Japan Blue 404

482-89-3, Japan Blue 201 3520-42-1, Japan Red 106 8004-92-0, Japan Yellow 203 9005-00-9, Polyethylene glycol stearyl ether 15876-39-8

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(first compns. containing colorants and surfactants for oxidative hair dyes)

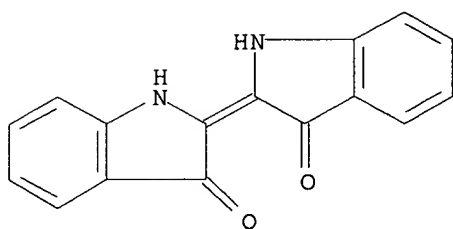
IT **482-89-3**, Japan Blue 201

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(first compns. containing colorants and surfactants for oxidative hair dyes)

RN 482-89-3 HCAPLUS

CN 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-(9CI) (CA INDEX NAME)



L48 ANSWER 4 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:278296 HCAPLUS
 DN 138:308929
 ED Entered STN: 10 Apr 2003
 TI Use of carbonyl compounds in hair treating **compositions** to
 enhance color fastness of dyed hair
 IN Oberkobusch, Doris; Hoeffkes, Horst; Hollenberg, Detlef; Gross, Wibke;
 Akram, Mustafa; Moeller, Hinrich
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 32 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10148671	A1	20030410	DE 2001-10148671	20011002
	WO 2003030848	A1	20030417	WO 2002-EP10957	20020930
	W: AU, BR, CA, CN, HU, JP, NO, PL, RU, US, VN				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
PRAI	DE 2001-10148671	A	20011002		
AB	<p>The invention concerns a method to increase color fastness of dyed hair that includes the treatment of hair before or after the dyeing process with a composition that contains aryl, heteroaryl or cyclic aliphatic carbonyl compds. with the exception of anthraquinone derivs. The treatment compns. further can contain polymers, surfactants, direct dyes protein hydrolyzates, UV filters, but they do not contain oxidative dyes. Thus a hair dye contained (g): Hydrenol D 8.5; Lorol 2.0; Eumulgin B2 1.5; Texapon NSO 15.0; Dehyton K 12.5; sodium sulfite 0.5; ascorbic acid 0.2; 4,5-diamino-1-(2-hydroxyethyl)pyrazole x H2SO4 1.03; ammonia (25% aqueous solution) to pH 10; water to 100. The dye was used in expts. for coloring hair. Samples were not treated after dyeing or treated with a composition that contained (g): Texapon NSO 15.0; Dehyton K 12.5; Hydrenol D 8.50; Lorol 2.00; Eumulgin B2 0.75; sodium sulfite 0.25; ascorbic acid 0.20; 3-dicyanmethylen indane-1-one 1.16; ammonia (25% aqueous solution) to pH 10; water to 100. Treated and untreated hair samples were exposed to washing tests and color fastness was measured; the treated samples were superior by 4.44 units.</p>				
ST	hair dye color fastness carbonyl compd				
IT	Optical filters (UV; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)				
IT	Carbonyl compounds (organic), biological studies				

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aromatic; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT Carbonyl compounds (organic), biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (cyclic aliphatic; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT Dyes
 (direct; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT Hair preparations
 (dyes, oxidative, excluded; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT Hair preparations
 (dyes; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT Color
 (fastness; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT Carbonyl compounds (organic), biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (heteroaryl; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT Surfactants
 (use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT Carbonyl compounds (organic), biological studies
 Polymers, biological studies
 Protein hydrolyzates
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT 84-65-1D, Anthraquinone, derivs.
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (excluded; use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

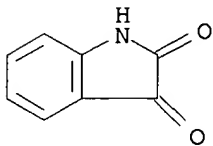
IT 82-86-0, Acenaphthenequinone 84-11-7, 9,10-Phenanthrenequinone
 90-15-3, 1-Naphthalenol **91-56-5**, Isatin 99-61-6,
 3-Nitrobenzaldehyde 458-36-6, Coniferylaldehyde 492-73-9, 2,2'-Pyridil
 524-42-5, 1,2-Naphthoquinone 552-89-6, 2-Nitrobenzaldehyde 555-16-8,
 4-Nitrobenzaldehyde, biological studies **611-09-6**, 5-Nitroisatin
 615-94-1, 2,5-Dihydroxy-p-benzoquinone 623-27-8, Terephthalaldehyde
 626-19-7, Isophthalaldehyde **830-74-0** 1080-74-6 1477-49-2
 2066-93-5, 1,2-Naphthoquinone-4-sulfonic acid 2835-95-2 2835-99-6
3433-54-3 6203-18-5 6369-59-1 14874-70-5D,
 Tetrafluoroborate, salts 15201-05-5D, salts 16053-58-0D, salts
 16722-51-3D, salts, biological studies 16887-00-6D, Chloride, salts
 16919-18-9D, Hexafluorophosphate, salts 19012-03-4 20461-54-5, Iodide,
 biological studies 24959-67-9D, Bromide, salts 37181-39-8D, salts
 54628-24-9D, salts **61394-93-2**, 4-Nitroisatin **112656-95-8**
118860-85-8 122438-74-8D, salts 149330-25-6 223398-02-5
 223398-08-1 364343-79-3 507490-23-5 **507490-24-6D**, salts
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (use of carbonyl compds. in hair treating compns. to enhance color fastness of dyed hair)

IT **91-56-5**, Isatin **611-09-6**, 5-Nitroisatin **830-74-0**
3433-54-3 **61394-93-2**, 4-Nitroisatin **112656-95-8**
118860-85-8 **507490-24-6D**, salts

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(use of carbonyl compds. in **hair** treating compns. to enhance
color fastness of **dyed hair**)

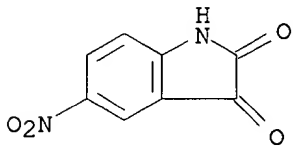
RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



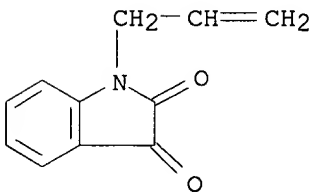
RN 611-09-6 HCAPLUS

CN 1H-Indole-2,3-dione, 5-nitro- (9CI) (CA INDEX NAME)



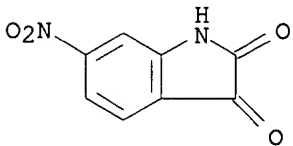
RN 830-74-0 HCAPLUS

CN 1H-Indole-2,3-dione, 1-(2-propenyl)- (9CI) (CA INDEX NAME)



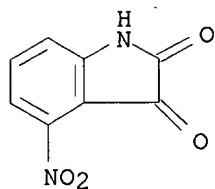
RN 3433-54-3 HCAPLUS

CN 1H-Indole-2,3-dione, 6-nitro- (9CI) (CA INDEX NAME)

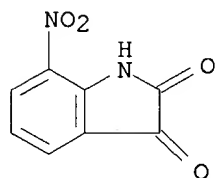


RN 61394-93-2 HCAPLUS

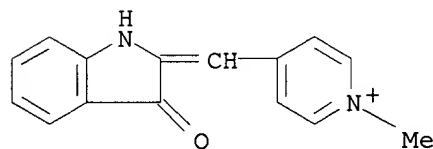
CN 1H-Indole-2,3-dione, 4-nitro- (9CI) (CA INDEX NAME)



RN 112656-95-8 HCAPLUS
CN 1H-Indole-2,3-dione, 7-nitro- (9CI) (CA INDEX NAME)

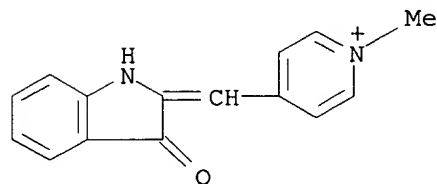


RN 118860-85-8 HCAPLUS
CN Pyridinium, 4-[(1,3-dihydro-3-oxo-2H-indol-2-ylidene)methyl]-1-methyl-, iodide (9CI) (CA INDEX NAME)



● I⁻

RN 507490-24-6 HCAPLUS
CN Pyridinium, 4-[(1,3-dihydro-3-oxo-2H-indol-2-ylidene)methyl]-1-methyl-, iodide (9CI) (CA INDEX NAME)



L48 ANSWER 5 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:2575 HCAPLUS
DN 138:61045
ED Entered STN: 03 Jan 2003

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

TI Hybrid hair dye molecules containing active groups for hair conditioning and hair dyeing
 IN Naumann, Frank; Akram, Mustafa; Hoeffkes, Horst; Kleen, Astrid; Rathjens, Andreas; Suenger, Georg; Huchel, Ursula
 PA Henkel Kgaa, Germany
 SO Ger. Offen., 58 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A61K007-13
 ICS A61K007-075
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 25, 33

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10129466	A1	20030102	DE 2001-10129466	20010619
PRAI	DE 2001-10129466		20010619		
AB	<p>The invention concerns hybrid hair dyes with the general formula P - (S - F)x; where x = 1-3; P = hair conditioning group; F = hair dye, developer or coupler precursor, direct dye; S = spacer. Conditioning groups are sugars, vitamins, amino acids, peptides; dyes are derivs. of indole, melanin, isatin etc. Thus a hybrid dye that included 4-amino-3,5-dinitrobenzoic acid as direct dye, glucose as conditioner and a connecting NH group was synthesized from 4-chloro-3,5-dinitrobenzoic acid and glucosamine hydrochloride. The hybrid product was included in a dye composition as a 1.00 g ingredient, the other components were (g): cream base 50.00; ammonium sulfate 1.00; ammonia (25% solution) to pH 9.5; water to 100. The cream base included (g): Hydrenol D 17.00; Lorol 4.00; Eumulgin B2 1.50; Texapon NSO 30.00; Dehyton K 25.00; water 22.50.</p>				
ST	hybrid hair dye conditioner mol				
IT	<p>Hair preparations (conditioners; hybrid hair dye mols. containing active groups for hair conditioning and hair dyeing)</p>				
IT	<p>Melanins RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (conjugates with conditioning substances; hybrid hair dye mols. containing active groups for hair conditioning and hair dyeing)</p>				
IT	<p>Amino acids, biological studies Carbohydrates, biological studies Peptides, biological studies Vitamins RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (conjugates with dyes; hybrid hair dye mols. containing active groups for hair conditioning and hair dyeing)</p>				
IT	<p>Dyes (direct; hybrid hair dye mols. containing active groups for hair conditioning and hair dyeing)</p>				
IT	<p>Hair preparations (dyes, oxidative; hybrid hair dye mols. containing active groups for hair conditioning and hair dyeing)</p>				
IT	<p>Hair preparations (dyes; hybrid hair dye mols. containing active groups for hair conditioning and hair dyeing)</p>				
IT	<p>7732-18-5, Water, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CASREACT)</p>				

IT **91-56-5D**, Isatin, derivs., conjugates with conditioning substances
 120-72-9D, Indole, derivs., conjugates with conditioning substances
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hybrid **hair dye** mols. containing active groups for
hair conditioning and **hair dyeing**)

IT 68715-89-9P 479193-94-7P 479193-98-1P
 RL: COS (Cosmetic use); RCT (Reactant); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES
 (Uses)
 (hybrid hair dye mols. containing active groups for hair conditioning and
 hair dyeing)

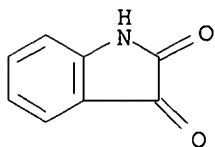
IT 30395-72-3P 479193-81-2P 479193-82-3P 479193-83-4P 479193-84-5P
 479193-85-6P 479193-86-7P 479193-87-8P 479193-88-9P 479193-90-3P
 479193-91-4P 479193-92-5P 479193-93-6P 479193-95-8P 479193-96-9P
 479193-97-0P
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
 study); PREP (Preparation); USES (Uses)
 (hybrid hair dye mols. containing active groups for hair conditioning and
 hair dyeing)

IT 50-99-7, D-Glucose, reactions 59-23-4, D-Galactose, reactions 63-42-3
 66-84-2, Glucosamine hydrochloride 70-34-8, Dinitrofluorobenzene
 77-86-1, (Trishydroxymethyl)methylamine 90-80-2, D-Gluconic
 acid-8-lactone 118-97-8, 4-Chloro-3,5-dinitrobenzoic acid
 123-30-8, 4-Aminophenol 572-09-8, Acetobromoglucose 604-69-3,
 β -D-Glucose pentaacetate 4214-76-0, 2-Amino-5-nitropyridine
 5367-57-7 7512-17-6, N-Acetyl-D-glucosamine 28767-75-1,
 N-(2-Aminoethyl)-2,4-dinitroaniline 29602-39-9 100418-33-5
 160219-76-1 223577-40-0 479194-00-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (hybrid hair dye mols. containing active groups for hair conditioning and
 hair dyeing)

IT 479193-99-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (hybrid hair dye mols. containing active groups for hair conditioning and
 hair dyeing)

IT **91-56-5D**, Isatin, derivs., conjugates with conditioning substances
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hybrid **hair dye** mols. containing active groups for
hair conditioning and **hair dyeing**)

RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 6 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:904285 HCAPLUS
 DN 137:375003
 ED Entered STN: 29 Nov 2002
 TI Synthesis of 1,3-dihydroxybenzene derivatives and their use in oxidative
 hair dyes

IN Chassot, Laurent; Braun, Hans-Juergen
 PA Wella Ag, Germany
 SO Ger. Offen., 14 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM C07D333-06
 ICS C07D333-12; C07D307-38; C07F007-08; A61K007-13; C07D207-325
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 27
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10125453	A1	20021128	DE 2001-10125453	20010525
	WO 2002096901	A2	20021205	WO 2002-EP850	20020128
	WO 2002096901	A3	20030313		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	BR 2002005398	A	20030701	BR 2002-5398	20020128
	EP 1392673	A2	20040303	EP 2002-711818	20020128
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2004016063	A1	20040129	US 2003-416048	20030503
PRAI	DE 2001-10125453	A	20010525		
	DE 2001-20108704	U	20010525		
	WO 2002-EP850	W	20020128		
OS	MARPAT 137:375003				
AB	The invention concerns 1,3-dihydroxybenzene derivs., their synthesis and application as coupling agents in oxidative hair dyes. Thus 1,3-dihydroxy-4-(thiophene-2yl)-benzene was synthesized in a three step reaction and used in a hair dye composition as a 1.25 mmol ingredient; other components were: 1,4-diaminobenzene 1.25 mmol; potassium oleate (8% solution) 1.0 g; ammonia (22% solution) 1.0 g; ethanol 1.0g; ascorbic acid 0.3 g; water to 100 g.				
ST	dihydroxybenzene deriv oxidative hair dye				
IT	Hair preparations (dyes, oxidative; synthesis of 1,3-dihydroxybenzene derivs. and their use in oxidative hair dyes)				
IT	72287-26-4, Di-chloro(1,1'-bis(diphenyl-phosphino)ferrocene)palladium RL: CAT (Catalyst use); USES (Uses) (synthesis of 1,3-dihydroxybenzene derivs. and their use in oxidative hair dyes)				
IT	83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-57-6, 5-Aminosalicylic acid 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol 91-56-5, 2,3-Indolinedione 91-68-9, 3-Diethylaminophenol 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9, 4-[Ethyl(2-hydroxyethyl)amino]aniline 93-05-0, 4-Diethylaminoaniline 95-55-6, 2-Aminophenol 95-70-5, 1,4-Diamino-2-methylbenzene 95-88-5, 1-Chloro-2,4-dihydroxybenzene				

99-07-0, 3-Dimethylaminophenol 99-98-9, 4-Dimethylaminoaniline
101-54-2, 4-Phenylaminoaniline 106-50-3, 1,4-Diaminobenzene, biological
studies 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3,
1,3-Dihydroxybenzene, biological studies 123-30-8, 4-Aminophenol
137-19-9, 1,5-Dichloro-2,4-dihydroxybenzene 141-86-6,
2,6-Diaminopyridine 150-75-4, 4-Methylaminophenol 399-95-1,
4-Amino-3-fluoro-phenol 399-96-2, 4-Amino-2-fluoro-phenol 533-31-3,
3,4-Methylenedioxyphenol 533-73-3, 1,2,4-Trihydroxy benzene 575-38-2,
1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5,
3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-methylbenzene 615-66-7,
2-Chloro-1,4-diaminobenzene 619-05-6, 3,4-Diaminobenzoic acid
770-25-2, 3-[(2-Hydroxyethyl)amino]phenol 1004-74-6,
2,4,5,6-Tetraaminopyrimidine 1004-75-7, 2,5,6-Triamino-4-(1H)-pyrimidone
1630-11-1, 1,4-Diamino-3,5-diethylbenzene 1687-53-2,
5-Amino-2-methoxyphenol 1953-54-4, 5-Hydroxyindole 2359-52-6,
4-[Di(2-hydroxyethyl)amino]-2-methylaniline 2380-84-9, 7-Hydroxyindole
2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2,
5-Amino-2-methylphenol 2835-96-3, 4-Amino-2-methylphenol 2835-98-5,
2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 3131-52-0,
5,6-Dihydroxyindole 4318-76-7, 2,5-Diaminopyridine 5306-96-7,
1,4-Diamino-2,3-dimethylbenzene 5349-76-8, 2,4-Diamino-1-methoxy-5-
methylbenzene 5697-02-9, 2-Methyl-1-naphthol-acetate 5862-80-6,
4-[(2,3-Dihydroxypropyl)amino]aniline 6201-65-6, 2-Chloro-1,3-
dihydroxybenzene 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline
6393-01-7, 1,4-Diamino-2,5-dimethylbenzene 6941-70-4,
6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7218-02-2,
1,4-Diamino-2,6-dimethylbenzene 7228-00-4, 2-[(3-Hydroxyphenyl)amino]-
acetamide 7469-77-4, 2-Methyl-1-naphthol 7575-35-1,
4-[Di(2-hydroxyethyl)amino]aniline 14268-66-7, 3,4-Methylenedioxyaniline
16867-03-1, 2-Amino-3-hydroxypyridine 17672-22-9, 2-Amino-6-methylphenol
26011-57-4, 6-Amino-3,4-dihydro-1,4(2H)-benzoxazine 26021-57-8,
3,4-Dihydro-6-hydroxy-1,4(2H)-benzoxazine 26455-21-0,
N-(3-Dimethylaminophenyl)urea 28020-38-4, 2,3-Diamino-6-methoxypyridine
29539-03-5, 5,6-Dihydroxyindoline 29785-47-5, 4-Amino-2-
(methoxymethyl)phenol 39489-79-7, 5-Amino-2,4-dichloro-phenol
45514-38-3, 4,5-Diamino-1-methyl-1H-pyrazole 53222-92-7,
3-Amino-2-methylphenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-
methylphenol 61693-42-3, 3-Amino-2,4-dichloro-phenol 66566-48-1,
4-[(2-Methoxyethyl)amino]aniline 67199-87-5, 1,4-Diamino-2-
aminomethylbenzene 70643-19-5, 2,4-Diamino-1-(2-hydroxyethoxy)benzene
71077-37-7, 1,3-Diamino-4-(2-methoxyethoxy)benzene 71500-41-9,
4-Amino-2-di[(2-hydroxyethyl)amino]-1-ethoxybenzene 71500-42-0,
3-[Di(2-hydroxyethyl)amino]aniline 73793-80-3, 1,4-Diamino-2-
hydroxymethylbenzene 75513-65-4, 1,3-Diamino-4-(2,3-dihydrox-
ypropoxy)benzene 76045-64-2, 3-[(2-Aminoethyl)amino]aniline
78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene 79352-72-0,
4-Amino-2-(aminomethyl)phenol 80592-80-9, 3-[(2,3-Dihydroxypropyl)amino]-
2-methylphenol 80592-81-0, 3-[(2-Hydroxyethyl)amino]-2-methylphenol
81892-72-0, 1,3-Di(2,4-diaminophenoxy)propane 83763-47-7,
2-Amino-4-[(2-hydroxyethyl)amino]anisole 84540-47-6,
2,6-Dihydroxy-3,4-dimethylpyridine 84540-48-7, 2,4-Diaminophenoxy acetic
acid 84540-50-1, 3-Amino-2-chloro-6-methylphenol 85679-78-3,
3,5-Diamino-2,6-dimethoxypyridine 86817-42-7, 2-(4-Amino-2-
hydroxyphenoxy)ethanol 90817-34-8, 3-Amino-6-methoxy-2-
(methylamino)pyridine 93841-24-8, 1,4-Diamino-2-(2-hydroxyethyl)benzene
94082-77-6, 2,4-Diamino-1,5-di(2-hydroxyethoxy)benzene 97902-52-8,
1,4-Diamino-2-(1-methylethyl)benzene 104333-08-6, 4-Amino-2-(2-
hydroxyethyl)phenol 104333-09-7, 4-Amino-2-(hydroxymethyl)phenol

104752-48-9, 4-[(3-Hydroxypropyl)amino]aniline 104752-50-3,
 1-(2-Aminoethoxy)-2,4-diaminobenzene 104752-51-4, 1,2-Dichloro-3,5-
 dihydroxy-4-methylbenzene 105293-89-8, 4-Dipropylaminoaniline
 109942-17-8, 2,5-Diaminobiphenyl 110102-86-8, 5-Amino-4-chloro-2-
 methylphenol 110952-46-0, 4-Amino-2-[(2-hydroxyethyl)amino]methylphenol
 111451-24-2, 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4,
 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-
 methylphenol 122481-67-8, 2,4-Di[(2-hydroxyethyl)amino]-1,5-
 dimethoxybenzene 126335-43-1, 1,4-Diamino-2-(2-hydroxyethoxy)benzene
 128729-30-6, 1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-propanol
 130582-53-5, 1,4-Bis[(4-Aminophenyl)amino]butane 137290-78-9,
 5-Amino-4-methoxy-2-methylphenol 137290-86-9, 5-[(2-Hydroxyethyl)amino]-
 4-methoxy-2-methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol
 141614-04-2, 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3
 141922-20-5, 2,4-Diamino-1-fluoro-5-methylbenzene 142082-56-2,
 3-[(2-Methoxyethyl)amino]phenol 146658-65-3, 5-[(3-Hydroxypropyl)amino]-
 2-methylphenol 149330-25-6, 2,6-Bis(2-hydroxyethyl)aminotoluene
 155601-16-4, 4,5-Diamino-1-(1-methylethyl)-1H-pyrazole 155601-17-5,
 4,5-Diamino-1-(2-hydroxyethyl)-1H-pyrazole 157469-54-0,
 4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-pyrazole 157469-55-1,
 1-[(4-Chlorophenyl)methyl]-4,5-diamino-1H-pyrazole 159661-45-7,
 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane 168092-23-7,
 Di(2,4-diaminophenoxy)methane 168202-61-7, 4-Amino-3-
 (hydroxymethyl)phenol 207568-58-9, 2-[2-(Acetylamino)ethoxy]-1,4-
 diaminobenzene 207923-07-7, 5-Amino-2-ethylphenol 244028-59-9,
 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole 244104-61-8 246244-41-7
 306959-12-6 307493-94-3, 1,3-Diamino-4-(3-hydroxypropoxy)benzene
 329320-36-7, 1,4-Diamino-2-(1-hydroxyethyl)benzene 337906-36-2,
 1,4-Diamino-2-methoxymethylbenzene 475391-60-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(synthesis of 1,3-dihydroxybenzene derivs. and their use in oxidative
 hair dyes)

IT 365548-62-5P 365548-63-6P 365548-64-7P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
 study); PREP (Preparation); USES (Uses)

(synthesis of 1,3-dihydroxybenzene derivs. and their use in oxidative
 hair dyes)

IT 110-87-2, 3,4-Dihydro-2H-pyran 1003-09-4, 2-Bromothiophene 6626-15-9,
 4-Bromo-1,3-dihydroxybenzene 13195-50-1, 2-Bromo-5-nitrothiophene
 14282-76-9, 2-Bromo-3-methylthiophene 73183-34-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of 1,3-dihydroxybenzene derivs. and their use in oxidative
 hair dyes)

IT 31963-61-8P 365548-74-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(synthesis of 1,3-dihydroxybenzene derivs. and their use in oxidative
 hair dyes)

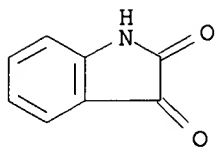
IT 91-56-5, 2,3-Indolinedione

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(synthesis of 1,3-dihydroxybenzene derivs. and their use in oxidative
 hair dyes)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 7 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:714066 HCAPLUS
 DN 137:252660
 ED Entered STN: 20 Sep 2002
 TI Oxidative hair dyes containing 3-(2,5-diaminophenyl)-acrylamide
 derivatives
 IN Chassot, Laurent; Braun, Hans-Juergen
 PA Wella Ag, Germany
 SO Ger. Offen., 20 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM C07C237-20
 ICS C07C259-06; D06P001-32; A61K007-13; C07D295-033; C07D307-02;
 C07D207-04; C07D295-16; C07D231-10; C07D401-10; C07D403-10;
 C07D211-36
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 25

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10113027	A1	20020919	DE 2001-10113027	20010317
	WO 2002074731	A1	20020926	WO 2001-EP12054	20011018
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,				
	PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,				
	US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1263712	A1	20021211	EP 2001-273996	20011018
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001010491	A	20030408	BR 2001-10491	20011018
	US 2003140431	A1	20030731	US 2002-258320	20021021
	US 6699990	B2	20040302		
PRAI	DE 2001-10113027	A	20010317		
	WO 2001-EP12054	W	20011018		
OS	MARPAT 137:252660				
AB	The invention concerns the synthesis of 3-(2,5-diaminophenyl)-acrylamide derivs. and their use in oxidative hair dyes as developers. Thus N-(4-aminophenyl)-3-(2,5-diaminophenyl)-acrylamide hydrochloride was synthesized and used in a hair dye composition as an 1.25 mmol ingredient with 1.25 mmol 1,3-dihydroxybenzene. Further ingredients were(g): sodium oleate 1; ascorbic acid 0.3; ethanol 1.0; ammonia (25 % aqueous solution) 1.0; water to 100.				
ST	oxidn hair dye diaminophenyl acrylamide deriv				

IT Dyes
(direct; oxidative hair dyes containing 3-(2,5-diaminophenyl)-acrylamide derivs.)

IT Hair preparations
(dyes, oxidative; oxidative hair dyes containing 3-(2,5-diaminophenyl)-acrylamide derivs.)

IT pH
(oxidative hair dyes containing 3-(2,5-diaminophenyl)-acrylamide derivs.)

IT 7732-18-5, Water, properties
RL: PRP (Properties)
(casreact)

IT 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol **91-56-5**, 2,3-Indolinedione 91-68-9, 3-Diethylaminophenol 92-44-4, 2,3-Dihydroxynaphthalene 95-70-5, 2,5-Diaminotoluene 95-88-5, 1-Chloro-2,4-dihydroxybenzene 99-07-0, 3-Dimethylaminophenol 106-50-3, 1,4-Diaminobenzene, biological studies 108-45-2, 1,3-Diaminobenzene, biological studies 137-19-9, 1,5-Dichloro-2,4-dihydroxybenzene 141-86-6, 2,6-Diaminopyridine 533-31-3, 3,4-Methylenedioxyphenol 575-38-2, 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-methylbenzene 619-05-6, 3,4-Diaminobenzoic acid 770-25-2, 3-[(2-Hydroxyethyl)amino]phenol 1004-74-6D, Tetraaminopyrimidine, derivs. 1687-53-2, 5-Amino-2-methoxyphenol 1953-54-4, 5-Hydroxyindole 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 3131-52-0, 5,6-Dihydroxyindole 5349-76-8, 2,4-Diamino-1-methoxy-5-methylbenzene 5697-02-9, 2-Methyl-1-naphthol-acetate 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7228-00-4, 2-[(3-Hydroxyphenyl)amino]acetamide 7469-77-4, 2-Methyl-1-naphthol 7722-84-1, Hydrogen peroxide, biological studies 16461-98-6D, 1H-Pyrazole-4,5-diamine, derivs. 16867-03-1, 2-Amino-3-hydroxypyridine 26011-57-4, 6-Amino-3,4-dihydro[1,4](2H)-benzoxazine 26021-57-8, 3,4-Dihydro-6-hydroxy-1,4(2H)-benzoxazine 26455-21-0, N-(3-Dimethylaminophenyl)-urea 28020-38-4, 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline 39489-79-7, 5-Amino-2,4-dichloro-phenol 53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-methylphenol 61693-42-3, 3-Amino-2,4-dichloro-phenol 70643-19-5, 2,4-Diamino-1-(2-hydroxyethoxy)benzene 71077-37-7, 1,3-Diamino-4-(2-methoxyethoxy)benzene 71500-41-9, 4-Amino-2-di[(2-hydroxyethyl)amino]-1-ethoxybenzene 71500-42-0, 3-[Di(2-hydroxyethyl)amino]aniline 75513-65-4, 1,3-Diamino-4-(2,3-dihydroxypropoxy)benzene 76045-64-2, 3-[(2-Aminoethyl)amino]aniline 78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene 80592-80-9, 3-[(2,3-Dihydroxypropyl)amino]-2-methylphenol 80592-81-0, 3-[(2-Hydroxyethyl)amino]-2-methylphenol 81892-72-0, 1,3-Di(2,4-diaminophenoxy)propane 83763-47-7, 2-Amino-4-[(2-hydroxyethyl)amino]anisole 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine 84540-48-7, 2,4-Diaminophenoxy acetic acid 84540-50-1, 3-Amino-2-chloro-6-methylphenol 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 86817-42-7, 2-(4-Amino-2-hydroxyphenoxy)ethanol 90817-34-8, 3-Amino-6-methoxy-2-(methylamino)pyridine 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 94082-77-6, 2,4-Diamino-1,5-di(2-hydroxyethoxy)benzene 104752-50-3, 1-(2-Aminoethoxy)-2,4-diaminobenzene 104752-51-4, 1,2-Dichloro-3,5-dihydroxy-4-methylbenzene 110102-86-8, 5-Amino-4-chloro-2-methylphenol 111451-24-2, 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-

methylphenol 122481-67-8, 2,4-Di[(2-hydroxyethyl)amino]-1,5-dimethoxybenzene 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 137290-86-9, 5-[(2-Hydroxyethyl)amino]-4-methoxy-2-methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol 141614-04-2, 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3, 2,4-Diamino-1-(2-hydroxyethoxy)-5-methylbenzene 141922-20-5, 2,4-Diamino-1-fluoro-5-methylbenzene 142082-56-2, 3-[(2-Methoxyethyl)amino]phenol 146658-65-3, 5-[(3-Hydroxypropyl)amino]-2-methylphenol 149330-25-6, 2,6-Bis(2-hydroxyethyl)aminotoluene 168092-23-7, Di(2,4-diaminophenoxy)methane 207923-07-7, 5-Amino-2-ethylphenol 244028-59-9, 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole 307493-94-3, 1,3-Diamino-4-(3-hydroxypropoxy)benzene 329320-36-7 460083-38-9 460083-39-0 460083-40-3 460083-41-4 460083-42-5 460083-43-6 460083-44-7 460083-45-8 460083-46-9 460083-47-0 460083-48-1 460083-49-2 460083-50-5 460083-51-6 460083-52-7 460084-08-6 460084-99-5

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(oxidative **hair dyes** containing 3-(2,5-diaminophenyl)-acrylamide derivs.)

IT 123-30-8, 4-Aminophenol 2835-95-2, 5-Amino-2-methylphenol 14268-66-7, 3,4-Methylenedioxylaniline

RL: COS (Cosmetic use); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(oxidative hair dyes containing 3-(2,5-diaminophenyl)-acrylamide derivs.)

IT 79-06-1DP, Acrylamide, 3-(2,5-diaminophenyl) derivs. 460083-53-8P
460083-54-9P 460083-55-0P 460083-56-1P 460083-57-2P 460083-58-3P
460083-59-4P 460083-60-7P 460083-61-8P 460083-62-9P 460083-63-0P
460083-64-1P 460083-65-2P 460083-66-3P 460083-67-4P 460083-68-5P
460083-69-6P 460083-70-9P 460083-71-0P 460083-72-1P 460083-73-2P
460083-74-3P 460083-75-4P 460083-76-5P 460083-77-6P 460083-78-7P
460083-79-8P 460083-80-1P 460083-81-2P 460083-82-3P 460083-83-4P
460083-84-5P 460083-85-6P 460083-86-7P 460083-87-8P 460083-88-9P
460083-89-0P 460083-90-3P 460083-92-5P 460083-94-7P 460083-95-8P
460083-96-9P 460083-97-0P 460083-98-1P 460083-99-2P 460084-00-8P
460084-01-9P 460084-03-1P 460084-05-3P 460084-06-4P 460084-07-5P
460084-10-0P 460084-11-1P 460084-12-2P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oxidative hair dyes containing 3-(2,5-diaminophenyl)-acrylamide derivs.)

IT 51-45-6, Histamine, reactions 56-40-6, Glycine, reactions 56-84-8, Aspartic acid, reactions 56-85-9, L-Glutamine, reactions 56-86-0, L-Glutamic acid, reactions 61-90-5, L-Leucine, reactions 70-47-3, L-Asparagine, reactions 72-18-4, L-Valine, reactions 74-89-5, Methylamine, reactions 75-04-7, Ethylamine, reactions 75-31-0, Isopropylamine, reactions 85-87-0 96-20-8, 2-Amino-1-butanol 99-57-0, 2-Amino-4-nitrophenol 107-10-8, Propylamine, reactions 107-11-9, Allylamine 107-15-3, Ethylenediamine, reactions 109-85-3, 2-Methoxyethylamine 110-91-8, Morpholine, reactions 123-75-1, Pyrrolidine, reactions 498-63-5, Prolinol 504-29-0, 2-Aminopyridine 616-30-8, 3-Amino-1,2-propanediol 617-89-0, Furfurylamine 765-30-0, Cyclopropylamine 1001-53-2, N-Acetylene diamine 2038-03-1, 4-Morpholineethanamine 2812-47-7, Prolinamide 4214-76-0, 2-Amino-5-nitro-pyridine 4795-29-3, Tetrahydrofurfurylamine 5036-48-6, 1-(3-Aminopropyl)-imidazole 5382-16-1, 4-Hydroxypiperidine 6168-72-5, 2-Aminopropanol 6358-09-4, 2-Amino-4-nitro-6-chlorophenol 6638-79-5, N,O-Dimethylhydroxylamine hydrochloride 6859-99-0, 3-Hydroxypiperidine 7575-35-1, 4-Bis-(2-hydroxyethyl)-amino-aniline 7663-77-6, 1-(3-Aminopropyl)-2-pyrrolidone 25739-59-7 35303-76-5,

4-(2-Aminoethyl)-benzene sulfonamide 40499-83-0, 3-Pyrrolidinol
 50610-28-1 68621-88-5 71026-66-9 155601-17-5, 4,5-Diamino-1-(2-
 hydroxyethyl)pyrazole 325953-40-0 325953-41-1 325953-45-5
 325953-46-6 325953-48-8 460084-09-7

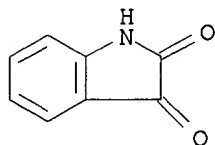
RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative hair dyes containing 3-(2,5-diaminophenyl)-acrylamide derivs.)

IT 91-56-5, 2,3-Indolinedione

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes containing 3-(2,5-diaminophenyl)-
 acrylamide derivs.)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 8 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:555473 HCAPLUS

DN 137:114648

ED Entered STN: 26 Jul 2002

TI Oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene
 derivatives

IN Chassot, Laurent; Braun, Hans-Juergen

PA Wella Aktiengesellschaft, Germany

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM C07D277-28

ICS A61K007-13

CC 64-3 (Pharmaceutical Analysis)

Section cross-reference(s): 28

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002057243	A1	20020725	WO 2001-EP10407	20010910
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10102084	A1	20020801	DE 2001-10102084	20010118
BR 2001007671	A	20030610	BR 2001-7671	20010910
EP 1351945	A1	20031015	EP 2001-965269	20010910
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003115683	A1	20030626	US 2002-203597	20020809
PRAI DE 2001-10102084	A	20010118		

WO 2001-EP10407 W 20010910

OS MARPAT 137:114648

AB 1,4-Diamino-2-(thiazol-2-yl)benzene derivs. their physiol. acceptable water-soluble salts for the oxidative coloring of keratin fibers. The hair dye compns. contain the 1,4-Diamino-2-(thiazol-2-yl)benzene derivs. as developers; the compns. further contain couplers, other developers and direct dyes. Thus 1,4-diamino-2-(thiazol-2-yl)benzene hydrochloride was synthesized and used in a hair dye **composition** as a 1.25 mmol ingredient along with 1,25 mmol 1,3-dihydroxy benzene ingredient. The hair dye further contained (g): potassium oleate (8% aq.soln) 1.0; ammonia (22% aq.solution) 1.0; ethanol 1.0; ascorbic acid 0.3; water to 100.

ST oxidative hair dye diamino thiazol benzene deriv

IT Hair preparations
(creams; oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT Dyes
(direct; oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT Hair preparations
(dyes, oxidative; oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT Hair preparations
(emulsions; oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT Hair preparations
(gels; oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT pH
(oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol 91-56-5, 2,3-Indoline dione 91-68-9, 3-Diethylaminophenol 92-44-4, 2,3-Dihydroxynaphthalene 95-70-5, 2,5-Diaminotoluene 95-88-5, 1-Chloro-2,4-dihydroxybenzene 99-07-0, 3-Dimethylaminophenol 106-50-3, 1,4-Diaminobenzene, biological studies 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 123-30-8, 4-Aminophenol 137-19-9, 1,5-Dichloro-2,4-dihydroxybenzene 141-86-6, 2,6-Diaminopyridine 533-31-3, 3,4-Methylenedioxyphenol 575-38-2, 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-methylbenzene 619-05-6, 3,4-Diaminobenzoic acid 770-25-2, 3-[(2-Hydroxyethyl)amino]phenol 1004-74-6, Tetraaminopyrimidine 1953-54-4, 5-Hydroxyindole 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2, 5-Amino-2-methylphenol 3131-52-0, 5,6-Dihydroxyindole 5349-76-8, 2,4-Diamino-1-methoxy-5-methylbenzene 5697-02-9, 2-Methyl-1-naphthol-acetate 6201-65-6, 2-Chloro-1,3-dihydroxybenzene 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7228-00-4, 2-[(3-Hydroxyphenyl)amino]acetamide 14268-66-7, 3,4-Methylenedioxyaniline 16461-98-6D, 1H-Pyrazole-3,4-diamine, derivs. 16867-03-1, 2-Amino-3-hydroxypyridine 26011-57-4, 6-Amino-3,4-dihydro[1,4](2H)-benzoxazine 26021-57-8, 3,4-Dihydro-6-hydroxy-1,4(2H)-benzoxazine 28020-38-4, 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline 39489-79-7, 5-Amino-2,4-dichloro-phenol 53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-methylphenol 61693-42-3, 3-Amino-2,4-dichloro-phenol 70643-19-5,

2,4-Diamino-1-(2-hydroxyethoxy)benzene 71500-41-9, 4-Amino-2-di[(2-hydroxyethyl)amino]-1-ethoxybenzene 71500-42-0, 3-[Di(2-hydroxyethyl)amino]aniline 76045-64-2, 3-[(2-Aminoethyl)amino]aniline 78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene 80592-80-9, 3-[(2,3-Dihydroxypropyl)amino]-2-methylphenol 80592-81-0, 3-[(2-Hydroxyethyl)amino]-2-methylphenol 81892-72-0, 1,3-Di(2,4-diaminophenoxy)propane 83763-47-7, 2-Amino-4-[(2-hydroxyethyl)amino]anisole 84540-48-7, 2,4-Diaminophenoxy acetic acid 84540-50-1, 3-Amino-2-chloro-6-methylphenol 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 86817-42-7, 2-(4-Amino-2-hydroxyphenoxy)ethanol 90817-34-8, 3-Amino-6-methoxy-2-(methylamino)pyridine 93841-24-8 94082-77-6, 2,4-Diamino-1,5-di(2-hydroxyethoxy)benzene 104752-50-3, 1-(2-Aminoethoxy)-2,4-diaminobenzene 104752-51-4, 1,2-Dichloro-3,5-dihydroxy-4-methylbenzene 110102-86-8, 5-Amino-4-chloro-2-methylphenol 111451-24-2, 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-methylphenol 122481-67-8, 2,4-Di[(2-hydroxyethyl)amino]-1,5-dimethoxybenzene 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol 141614-04-2, 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3, 2,4-Diamino-1-(2-hydroxyethoxy)-5-methylbenzene 141922-20-5, 2,4-Diamino-1-fluoro-5-methylbenzene 142082-56-2, 3-[(2-Methoxyethyl)amino]phenol 146658-65-3, 5-[(3-Hydroxypropyl)amino]-2-methylphenol 149330-25-6, 2,6-Bis(2-hydroxyethyl)aminotoluene 168092-23-7, Di(2,4-diaminophenoxy)methane 207923-07-7, 5-Amino-2-ethylphenol 244028-59-9, 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole 443641-95-0 443641-97-2 443641-98-3

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative **hair dyes** containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT 443641-92-7P 443641-93-8P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT 3034-53-5, 2-Bromothiazole 244104-65-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

IT 251115-20-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(oxidative hair dyes containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) BASF AG; DE 2125193 A 1972 HCAPLUS
- (2) Konrad, G; US 4828568 A 1989 HCAPLUS
- (3) Wella AG; DE 19812059 C 1999 HCAPLUS
- (4) Wella AG; EP 1052252 A 2000 HCAPLUS
- (5) Wella AG; DE 20108704 U 2001 HCAPLUS

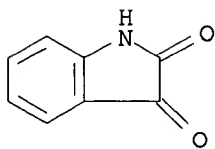
IT 91-56-5, 2,3-Indoline dione

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative **hair dyes** containing 1,4-diamino-2-(thiazol-2-yl)benzene derivs.)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 9 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:426624 HCAPLUS

DN 137:10702

ED Entered STN: 06 Jun 2002

TI Hair dyeing **compositions** containing dihydroxy aromatic compound and manganese or zinc salts

IN Pruche, Francis

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1210931	A1	20020605	EP 2001-403101	20011203
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	FR 2817469	A1	20020607	FR 2000-15695	20001204
	FR 2817469	B1	20030418		
	JP 2002255767	A2	20020911	JP 2001-370743	20011204
	US 2002124330	A1	20020912	US 2001-222	20011204
PRAI	FR 2000-15695	A	20001204		
OS	MARPAT 137:10702				
AB	Hair dye compns. contain dihydroxy group-containing aromatic compds., a second precursor compound, e.g., an aromatic amine, salts of Mn(II) and/or Zn (II) and alkaline hydrogen carbonates. Thus, a formulation contained catechol 25, and p-phenylenediamine 25 mg, MnCl ₂ (10 mM/L), and NaHCO ₃ (1M) 10 mL.				
ST	hair dye arom hydroxy manganese salt; bicarbonate hair dye amine zinc salt				
IT	Aglycons				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)				
	(anthocyanidins; hair dyeing compns. containing dihydroxy aromatic compound and				
	manganese or zinc salts)				
IT	Amines, biological studies				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)				
	(diamines, aromatic; hair dyeing compns. containing dihydroxy aromatic compound and				
	manganese or zinc salts)				
IT	Hair preparations				
	(dyes, oxidative; hair dyeing compns. containing dihydroxy aromatic compound and				
	manganese or zinc salts)				
IT	Hair preparations				
	(dyes; hair dyeing compns. containing dihydroxy aromatic compound and				
	manganese				
	or zinc salts)				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

IT Apple
 Banana (Musa)
 Embryophyta
 Fruit
 Potato (Solanum tuberosum)
 Raisin
 Vegetable
 (exts.; hair dyeing compns. containing dihydroxy aromatic compound and manganese or zinc salts)

IT Anthocyanins
 Bicarbonates
 Bisphenols
 Flavanols
 Phenols, biological studies
 Quinones
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. containing dihydroxy aromatic compound and manganese or zinc salts)

IT Carboxylic acids, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hydroxy, salts; hair dyeing compns. containing dihydroxy aromatic compound and manganese or zinc salts)

IT Flavones
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hydroxy; hair dyeing compns. containing dihydroxy aromatic compound and manganese or zinc salts)

IT Aglycons
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (iridoid; hair dyeing compns. containing dihydroxy aromatic compound and manganese or zinc salts)

IT Phenols, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (naphthols; hair dyeing compns. containing dihydroxy aromatic compound and manganese or zinc salts)

IT Carboxylic acids, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (salts; hair dyeing compns. containing dihydroxy aromatic compound and manganese or zinc salts)

IT 51-17-2D, Benzimidazole, derivs. 54-96-6, 3,4-Pyridinediamine 59-92-7, 3,4-Dihydroxyphenylalanine, biological studies 59-92-7D, 3,4-Dihydroxyphenylalanine, derivs. 87-66-1D, 1,2,3-Trihydroxybenzene, derivs. 89-25-8 91-22-5D, Quinoline, derivs. 95-16-9D, Benzothiazole, derivs. 95-54-5D, o-Phenylenediamine, derivs. 95-55-6, o-Aminophenol 95-55-6D, o-Aminophenol, derivs. 95-70-5, p-Toluenediamine 95-88-5 106-50-3, p-Phenylenediamine, biological studies 106-50-3D, p-Phenylenediamine, derivs. 108-26-9 108-45-2, 1,3-Benzenediamine, biological studies 108-45-2D, m-Phenylenediamine, derivs. 108-46-3, 1,3-Benzenediol, biological studies 110-86-1D, Pyridine, derivs. 120-72-9D, Indole, derivs. 120-80-9D, 1,2-Dihydroxybenzene, derivs. 123-30-8, p-Aminophenol 123-30-8D, p-Aminophenol, derivs. 144-55-8, Sodium hydrogen carbonate, biological studies 271-44-3D, Indazole, derivs. 273-53-0D, Benzoxazole, derivs. 274-09-9D, 1,3-Benzodioxole, derivs. 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs. 298-14-6 399-95-1, 4-Amino-3-fluorophenol 496-15-1D, Indoline, derivs. 533-31-3, Sesamol

533-31-3D, Sesamol, derivs. 533-73-3D, 1,2,4-Trihydroxybenzene, derivs.
 591-27-5 591-27-5D, m-Aminophenol, derivs. 608-25-3 615-66-7,
 2-Chloro-p-phenylenediamine 1004-74-6, Pyrimidinetetramine 1004-75-7
 1124-09-0, 2,4,5-Trihydroxytoluene 1314-13-2, Zinc oxide, biological
 studies 1321-67-1, Naphthol 1344-43-0, Manganese oxide, biological
 studies 1630-11-1, 2,6-Diethyl-p-phenylenediamine 2090-64-4, Magnesium
 hydrogen carbonate 2380-86-1, 6-Hydroxyindole 2380-94-1,
 4-Hydroxyindole 2835-95-2 2835-96-3, 4-Amino-2-methylphenol
 2835-98-5 2835-99-6, 4-Amino-3-methylphenol 3131-52-0,
 5,6-Dihydroxyindole 3131-52-0D, 5,6-Dihydroxyindole, derivs. 3240-72-0
 3546-50-7, 2,4,5-Pyrimidinetriamine 3983-19-5, Calcium hydrogen
 carbonate 4318-76-7, 2,5-Pyridinediamine 4664-16-8 4770-37-0,
 6-Hydroxyindoline 5306-96-7, 2,3-Dimethyl-p-phenylenediamine
5638-85-7, 1H-Indole-2,3-diol **5638-85-7D**,
 1H-Indole-2,3-diol, derivs. 7218-02-2, 2,6-Dimethyl-p-phenylenediamine
 7439-96-5D, Manganese, salts 7440-66-6D, Zinc, salts 7556-37-8
 7575-35-1, N,N-Bis(β -Hydroxyethyl)-p-phenylenediamine 7646-85-7,
 Zinc chloride, biological studies 7773-01-5, Manganese chloride
 16461-98-6, 1H-Pyrazole-3,4-diamine 16867-03-1 17672-22-9 22715-34-0
 27323-69-9D, Dihydroxycinnamic acid, derivs. 28020-38-4 28900-64-3,
 2,3-Dihydroxyphenylalanine 28900-64-3D, 2,3-Dihydroxyphenylalanine,
 derivs. 29539-03-5, 5,6-Dihydroxyindoline 29656-58-4D, Hydroxybenzoic
 acid, derivs. 29785-47-5, 4-Amino-2-methoxymethylphenol 30569-52-9
 39455-90-8D, Pyrazolone, derivs. 41010-68-8 43070-85-5D,
 Hydroxycoumarin, derivs. 45514-38-3 46160-00-3 50322-90-2D,
 Hydroxychalcone, derivs. 52943-88-1 55302-96-0 56685-04-2D,
 Benzofuranol, derivs. 60772-49-8D, Hydroxyxanthone, derivs. 63969-43-7
 65308-63-6D, Hydroxychromone, derivs. 69151-32-2 70643-19-5
 79352-72-0, 4-Amino-2-aminomethylphenol 81892-72-0 83763-47-7
 93841-24-8 93846-05-0 96886-30-5 97902-52-8, 2-Isopropyl-p-
 phenylenediamine 104333-09-7, 4-Amino-2-hydroxymethylphenol
 110952-46-0 118020-67-0, 1H-Pyrazole-3,4,5-triamine 126335-43-1
 128729-30-6 128729-31-7 129697-50-3, 5-Acetamido-2-aminophenol
 130582-53-5 132026-21-2 132026-22-3 132026-42-7 135855-34-4
 135855-35-5 145441-19-6 155601-17-5 157469-55-1 168202-61-7,
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 184173-00-0 184173-01-1 184173-02-2 184173-03-3 184173-32-8
 184173-43-1 184173-45-3 191731-07-4 191731-08-5 201599-12-4,
 Pyrazolo[1,5-a]pyrimidine-3,7-diamine 201599-15-7 201599-16-8,
 Pyrazolo[1,5-a]pyrimidine-3,5-diamine 201599-17-9 201599-18-0
 201599-20-4 201599-21-5 201599-23-7 201599-24-8 201599-25-9
 201599-26-0 201599-27-1 221110-58-3 267407-85-2 412029-30-2,
 1H-Indole-4,5-diol 412029-30-2D, 1H-Indole-4,5-diol, derivs.
 412029-31-3, 1H-Indole-6,7-diol 412029-31-3D, 1H-Indole-6,7-diol,
 derivs. 412050-23-8D, Hydroxyisocoumarin, derivs.

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(**hair dyeing** compns. containing dihydroxy aromatic compound
 and manganese or zinc salts)

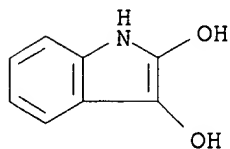
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Bristol-Myers Squibb Company; EP 0621029 A 1994 HCAPLUS
- (2) Fa Carl Brehmer & Sohn; DE 2222001 A 1973 HCAPLUS
- (3) Goldwell; EP 0642783 A 1995 HCAPLUS
- (4) Henkel; DE 19859682 A 2000 HCAPLUS
- (5) L'Oreal; FR 2748274 A 1997 HCAPLUS
- (6) Steifel Laboratories Inc; GB 2307175 A 1997 HCAPLUS

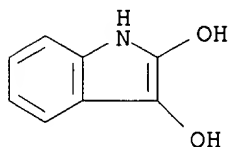
IT **5638-85-7**, 1H-Indole-2,3-diol **5638-85-7D**,
 1H-Indole-2,3-diol, derivs.

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(**hair dyeing** compns. containing dihydroxy aromatic compound
and manganese or zinc salts)

RN 5638-85-7 HCAPLUS
CN 1H-Indole-2,3-diol (9CI) (CA INDEX NAME)

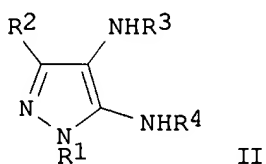
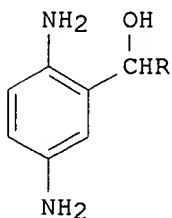


RN 5638-85-7 HCAPLUS
CN 1H-Indole-2,3-diol (9CI) (CA INDEX NAME)



L48 ANSWER 10 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:107007 HCAPLUS
DN 136:156183
ED Entered STN: 10 Feb 2002
TI Oxydative hair dyes containing derivatives of 2,5-Diamino-1-(1'-
hydroxyalkyl)-benzene and 4,5-diaminopyrazole
IN Chassot, Laurent; Goettel, Otto; Braun, Hans-Juergen
PA Wella A.-G., Germany
SO Ger. Offen., 8 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM A61K007-13
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10037158	A1	20020207	DE 2000-10037158	20000728
PRAI	DE 2000-10037158		20000728		
OS	MARPAT 136:156183				
GI					



AB The invention concerns oxidative hair dyes that contain 2,5-diamino benzene derivs. (I), especially 1,4-Diamino-2-(1-hydroxyethyl)benzene, 1,4-Diamino-2-(1-hydroxypropyl)benzene and 4,5-diaminopyrazole derivs. (II). The dye compns. further contain couplers and direct dyes. Thus a **composition** contained (g): 1,4-Diamino-2-(1-hydroxypropyl)benzene 0.3; 4,5-diamino-1(2-hydroxyethyl)-pyrazole sulfate 0.3; 1,3-dihydroxybenzene 0.2; 1-naphthol 0.3; sodium oleate (8% aqueous solution) 10.0; ammonia (22% aqueous solution) 10.0; ethanol 10.0; ascorbic acid 0.3; water to 100.0. Directly before application, 30 g of the **composition** was mixed with 30 g 6% hydrogen peroxide solution; the product resulted red-brown hair color.

ST oxidative hair dye diaminohydroxyalkyl benzene diaminopyrazole deriv

IT Dyes
(direct; oxydative hair dyes containing derivs. of 2,5-Diamino-1-(1'-hydroxyalkyl)-benzene and 4,5-diaminopyrazole)

IT Hair preparations
(dyes, oxidative; oxydative hair dyes containing derivs. of 2,5-Diamino-1-(1'-hydroxyalkyl)-benzene and 4,5-diaminopyrazole)

IT 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol 91-56-5, 2,3-Indolinedione 91-68-9, 3-Diethylaminophenol 92-44-4, 2,3-Dihydroxynaphthalene 95-70-5, 2,5-Diaminotoluene 95-84-1, 2-Amino-4-methylphenol 95-86-3, 2,4-Diaminophenol 95-88-5, 1-Chloro-2,4-dihydroxybenzene 99-07-0, 3-Dimethylaminophenol 101-54-2 106-50-3, 1,4-Diaminobenzene, biological studies 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 123-30-8, 4-Aminophenol 137-19-9, 1,5-Dichloro-2,4-dihydroxybenzene 141-86-6, 2,6-Diaminopyridine 533-31-3, 3,4-Methylenedioxyphenol 537-65-5, 4,4'-Diaminodiphenylamine 575-38-2, 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-methylbenzene 615-66-7, 2-Chloro-1,4-Diaminobenzene 619-05-6, 3,4-Diaminobenzoic acid 770-25-2, 3-[(2-Hydroxyethyl)amino]phenol 1004-74-6, Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1953-54-4, 5-Hydroxyindole 2359-53-7 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2, 5-Amino-2-methylphenol 2835-96-3, 2-Methyl-4-aminophenol 2835-98-5, 5-Methyl-2-aminophenol 2835-99-6, 4-Amino-3-methylphenol 3131-52-0, 5,6-Dihydroxyindole 4928-43-2, 2-Dimethylamino-5-aminopyridine 5306-96-7 5307-02-8, 2-Methoxy[1,4]diaminobenzene 5349-76-8, 2,4-Diamino-1-methoxy-5-methylbenzene 5697-02-9, 2-Methyl-1-naphthol-acetate 6201-65-6, 2-Chloro-1,3-dihydroxybenzene 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7218-02-2, 2,6-Dimethyl[1,4]diaminobenzene 7228-00-4, 2-[(3-Hydroxyphenyl)amino] acetamide 7575-35-1, N,N-Bis(β-hydroxyethyl)-p-phenylenediamine 7722-84-1, Hydrogen peroxide, biological studies 14268-66-7, 3,4-Methylenedioxyaniline 16461-98-6, 1H-Pyrazole-4,5-diamine 16461-98-6D, 1H-Pyrazole-4,5-diamine, derivs. 16867-03-1, 2-Amino-3-hydroxypyridine 17672-22-9, 6-Methyl-2-aminophenol 26011-57-4, 6-Amino-3,4-dihydro[1,4](2H)-benzoxazine 26021-57-8, 3,4-Dihydro-6-hydroxy[1,4](2H)-benzoxazine 28020-38-4, 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline 29785-47-5, 2-Methoxymethyl-4-aminophenol 39489-79-7, 5-Amino-2,4-dichlorophenol 42485-84-7, 2-Ethylamino-4-methylphenol 45514-38-3, 4,5-Diamino-1-methyl-1H-pyrazole 52943-88-1

53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-methylphenol 61693-42-3, 3-Amino-2,4-dichlorophenol 66566-48-1
 70643-19-5, 2,4-Diamino-1-(2-hydroxyethoxy)benzene 71077-37-7
 71500-41-9, 4-Amino-2-di[(2-hydroxyethyl)amino]-1-ethoxybenzene
 71500-42-0, 3-Di(2-hydroxyethyl)amino]-aniline 76045-64-2,
 3-[(2-Aminoethyl)amino]aniline 78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene 79352-72-0, 4-Amino-2-aminomethylphenol 80592-80-9,
 3-[(2,3-Dihydroxypropyl)amino]-2-methylphenol 80592-81-0,
 3-[(2-Hydroxyethyl)amino]-2-methylphenol 81892-72-0,
 1,3-Di(2,4-diaminophenoxy)propane 83763-47-7 84540-48-7,
 2,4-Diaminophenoxy acetic acid 84540-50-1, 3-Amino-2-chloro-6-methylphenol 86817-42-7, 2-(4-Amino-2-hydroxyphenoxy)ethanol 90817-34-8, 3-Amino-6-methoxy-2-(methylamino)pyridine 90817-35-9
 93841-24-8, 2-(2,5-Diaminophenyl)-ethanol 94082-77-6,
 2,4-Diamino-1,5-di(2-hydroxyethoxy)benzene 96886-30-5 97902-51-7,
 1,4-Benzenediamine, 2-propyl- 97902-52-8 104333-09-7,
 2-Hydroxymethyl-4-aminophenol 104752-50-3, 1-(2-Aminoethoxy)-2,4-diaminobenzene 104752-51-4, 1,2-Dichloro-3,5-dihydroxy-4-methylbenzene 110102-86-8, 5-Amino-4-chloro-2-methylphenol 110952-46-0 111451-24-2,
 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4,
 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-methylphenol 122481-67-8, 2,4-Di-[(2-hydroxyethyl)amino]-1,5-dimethoxybenzene 128729-30-6 131311-66-5 132026-41-6 132026-42-7
 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 139443-57-5,
 5-Amino-4-ethoxy-2-methylphenol 141614-04-2, 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3, 2,4-Diamino-1-(2-hydroxyethoxy)-5-methylbenzene 141922-20-5, 2,4-Diamino-1-fluoro-5-methylbenzene 142082-56-2, 3-[(2-Methoxyethyl)amino]phenol 146658-65-3,
 5-[(3-Hydroxypropyl)amino]-2-methylphenol 149330-25-6,
 2,6-Bis(2-hydroxyethyl)aminotoluene 155601-15-3 155601-16-4
 155601-17-5 155601-30-2, 4,5-Diamino-1(2-hydroxyethyl)-pyrazole sulfate 157469-53-9 157469-54-0 157469-55-1 157469-56-2 157469-57-3
 168092-23-7, Di(2,4-diaminophenoxy)methane 207923-07-7,
 5-Amino-2-ethylphenol 220264-58-4 220264-60-8 244028-59-9,
 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole 307493-94-3,
 3-(2,4-Diaminophenoxy)-1-propanol 308279-59-6 308279-60-9
 308279-61-0 308279-62-1 308279-63-2 329320-36-7, Benzenemethanol,
 2,5-diamino- α -methyl- 393781-77-6

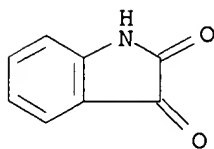
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxydative **hair dyes** containing derivs. of
 2,5-Diamino-1-(1'-hydroxyalkyl)-benzene and 4,5-diaminopyrazole)

IT 91-56-5, 2,3-Indolinedione

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxydative **hair dyes** containing derivs. of
 2,5-Diamino-1-(1'-hydroxyalkyl)-benzene and 4,5-diaminopyrazole)

RN 91-56-5 HCAPLUS

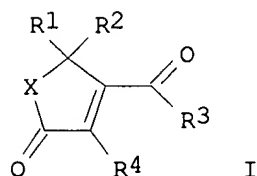
CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



AN 2001:923231 HCAPLUS
 DN 136:58497
 ED Entered STN: 21 Dec 2001
 TI Hair dyeing **compositions** containing oxocyclopentenenes
 IN Gross, Wibke; Hoeffkes, Horst; Martin, Hans-Dieter; Moeller, Hinrich;
 Oberkobusch, Doris
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 18 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 23

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10029933	A1	20011220	DE 2000-10029933	20000617
	WO 2001097762	A1	20011227	WO 2001-EP6545	20010609
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	EP 1311231	A1	20030521	EP 2001-949394	20010609
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
PRAI	DE 2000-10029933	A	20000617		
	WO 2001-EP6545	W	20010609		
OS	MARPAT 136:58497				
GI					



AB Hair dyes contain oxocyclopentene derivative (I, R1 and R2 = H, or a C1-4 alkyl, R3 and R4 = H, C1-4 alkyl or group of aryls, the remainder of R1 and R2 and/or R3 and R4 can form a ring, and X = C:O, C:S or CH2). Thus, 2,5,5-trimethyl-3-oxocyclopent-1-enecarboxaldehyde (II) was prepared and used in a formulation consisting of II 8, Natrosol 250HR 2.0 and water to 100 g.

ST oxacyclopentene hair dye prepn

IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aromatic, primary; hair dyeing compns. containing oxocyclopentenenes)

IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aryl, secondary; hair dyeing compns. containing oxocyclopentenenes)

IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (diamines, aromatic; hair dyeing compns. containing oxocyclopentenenes)

IT Hair preparations
 (dyes; hair dyeing compns. containing oxocyclopentenenes)

IT Shampoos
(hair dyeing compns. containing oxocyclopentenenes)

IT Amino acids, biological studies
Nitriles, biological studies
Phenols, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyeing compns. containing oxocyclopentenenes)

IT Caseins, biological studies
Collagens, biological studies
Elastins
Keratins
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hydrolyzates; hair dyeing compns. containing oxocyclopentenenes)

IT Peptides, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(oligopeptides; hair dyeing compns. containing oxocyclopentenenes)

IT Protein hydrolyzates
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(soya; hair dyeing compns. containing oxocyclopentenenes)

IT Protein hydrolyzates
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(wheat gluten; hair dyeing compns. containing oxocyclopentenenes)

IT Glutens
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(wheat, hydrolyzates; hair dyeing compns. containing oxocyclopentenenes)

IT 56-87-1, L-Lysine, biological studies 59-48-3 59-92-7, biological studies 60-18-4, L-Tyrosine, biological studies 62-53-3, Benzenamine, biological studies 63-91-2, L-Phenylalanine, biological studies 65-49-6 67-52-7, 2,4,6(1H,3H,5H)-Pyrimidinetrione 70-18-8, biological studies 70-26-8, L-Ornithine 71-00-1, L-Histidine, biological studies 73-22-3, L-Tryptophan, biological studies 74-79-3, L-Arginine, biological studies 77-32-7 81-11-8 83-30-7 83-33-0 83-56-7, 1,5-Naphthalenediol 84-65-1, 9,10-Anthracenedione 84-65-1D, Anthraquinone, derivs. 87-02-5 87-66-1, 1,2,3-Benzenetriol 88-21-1 88-74-4 89-57-6 89-86-1 90-05-1 90-15-3, 1-Naphthalenol 90-20-0 91-29-2 92-44-4, 2,3-Naphthalenediol 92-65-9 95-54-5, 1,2-Benzenediamine, biological studies 95-55-6 95-70-5 95-88-5 96-91-3 96-93-5 98-37-3 99-05-8 99-07-0 99-31-0 99-50-3 99-56-9 100-01-6, biological studies 101-77-9 101-80-4 102-32-9 106-50-3, 1,4-Benzenediamine, biological studies 107-95-9, β -Alanine 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 108-72-5, 1,3,5-Benzenetriamine 108-73-6, 1,3,5-Benzenetriol 109-00-2, 3-Pyridinol 110-85-0, Piperazine, biological studies 110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological studies 116-63-2 118-12-7 118-70-7, 4,5,6-Pyrimidinetriamine 118-92-3 119-34-6 119-59-5 119-70-0 119-72-2 120-72-9, 1H-Indole, biological studies 120-80-9, 1,2-Benzenediol, biological studies 121-47-1 121-57-3 123-30-8 123-31-9, 1,4-Benzenediol, biological studies 123-75-1, Pyrrolidine, biological studies 139-65-1 141-84-4 141-86-6, 2,6-Pyridinediamine 142-08-5, 2(1H)-Pyridinone 147-85-3, L-Proline, biological studies 149-87-1 149-91-7, biological studies 150-13-0 150-19-6 150-75-4 150-76-5 156-81-0, 2,4-Pyrimidinediamine 288-13-1, 1H-Pyrazole 288-32-4, 1H-Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole 462-08-8, 3-Pyridinamine 480-66-0 488-87-9 496-73-1 498-94-2, 4-Piperidinecarboxylic acid 498-95-3, 3-Piperidinecarboxylic acid 500-85-6D, Indophenol, derivs. 504-15-4 504-17-6 504-24-5,

4-Pyridinamine 504-29-0, 2-Pyridinamine 517-22-6 533-31-3,
 1,3-Benzodioxol-5-ol 533-73-3, 1,2,4-Benzenetriol 535-75-1,
 2-Piperidinecarboxylic acid 535-87-5 537-65-5 553-86-6,
 2(3H)-Benzofuranone 556-03-6, Tyrosine 570-24-1 578-66-5,
 8-Quinolinamine 580-17-6, 3-Quinolinamine 580-22-3, 2-Quinolinamine
 582-17-2, 2,7-Naphthalenediol 591-27-5 603-81-6 606-23-5,
 1H-Indene-1,3(2H)-dione 606-55-3 606-57-5 **608-08-2**
 608-25-3 610-74-2 610-81-1 611-03-0 611-98-3 614-82-4 615-66-7
 615-71-4, 1,2,4-Benzenetriamine 616-45-5, 2-Pyrrolidinone 616-47-7
 619-05-6 623-09-6 626-64-2, 4-Pyridinol 636-25-9 876-87-9
 934-22-5, 1H-Benzimidazol-5-amine 1004-74-6, Pyrimidinetetramine
 1004-75-7 1123-55-3, 7-Benzothiazolamine 1123-93-9,
 5-Benzothiazolamine 1125-60-6, 5-Isoquinolinamine 1197-55-3
 1455-77-2, 1H-1,2,4-Triazole-3,5-diamine 1571-72-8 1820-80-0,
 1H-Pyrazol-3-amine 1953-54-4, 1H-Indol-5-ol 2374-03-0 2380-84-9,
 1H-Indol-7-ol 2380-86-1, 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol
 2510-01-2 2654-52-6 2785-06-0 2835-98-5 2835-99-6 2871-01-4
 3131-52-0, 1H-Indole-5,6-diol 3158-63-2 3167-49-5 3342-78-7
 3855-78-5 4331-29-7, 1H-Benzimidazol-4-amine 4506-66-5 4928-43-2
 5007-67-0 5099-39-8 5131-58-8 5192-03-0, 1H-Indol-5-amine
 5192-04-1, 1H-Indol-7-amine 5192-23-4, 1H-Indol-4-amine 5217-47-0
 5307-14-2 5318-27-4, 1H-Indol-6-amine 5345-47-1 5418-63-3
 5434-20-8 5718-83-2 5850-35-1 5959-52-4 6201-65-6 6247-27-4
 6259-50-3 6358-09-4 6399-72-0 6628-04-2 6634-82-8 6967-12-0,
 1H-Indazol-6-amine 7336-20-1 7411-49-6 7575-35-1 7749-47-5
 7768-28-7 10173-66-7 13754-19-3, 4,5-Pyrimidinediamine 14268-66-7,
 1,3-Benzodioxol-5-amine 14338-36-4 16082-33-0, 1H-Pyrazole-3,5-diamine
 16859-86-2 16867-03-1 19335-11-6, 1H-Indazol-5-amine 20103-09-7
 22715-34-0 23244-87-3, 2,4,5-Pyridinetriamine 23894-07-7 24119-24-2
 24905-87-1 28020-38-4 28491-52-3 29539-03-5 29705-39-3
 31835-64-0 39267-74-8 41927-50-8 41946-53-6 42952-29-4
 49647-58-7 50610-28-1 51387-92-9 55302-96-0 56932-44-6
 58480-17-4 61224-35-9 61693-42-3 62496-02-0 62952-42-5
 63969-46-0 64993-07-3 66566-48-1 66635-40-3 68391-32-2
 69825-83-8 70643-19-5 71134-97-9 74918-21-1 77484-77-6
 79352-72-0 82576-75-8 83220-31-9 83220-31-9D, mixts. containing
 83763-47-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyeing compns. containing oxocyclopentenones)

IT 83960-83-2 84540-47-6 84540-50-1 85679-78-3 85926-99-4
 87798-73-0 87814-15-1 90817-34-8 93841-24-8 93923-57-0
 95576-89-9 102574-14-1 104333-09-7 108946-76-5 110102-86-8
 110952-48-2 114402-54-9 115423-86-4 117907-43-4 126335-41-9
 128729-30-6 130582-56-8 137290-86-9 144644-13-3 155601-17-5
 159661-42-4 202525-73-3 202525-74-4 202525-75-5 202525-76-6
 202525-77-7 202525-78-8 202525-79-9 211872-02-5 215377-52-9
 220118-56-9 251450-62-1 346593-13-3 346684-81-9 380897-75-6
 380897-77-8 380897-79-0 381211-38-7 381211-39-8 381211-42-3
 381211-44-5 381211-96-7 381212-15-3 381212-17-5

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyeing compns. containing oxocyclopentenones)

IT 58626-49-6P 108946-70-9P

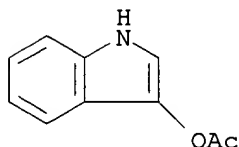
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(hair dyeing compns. containing oxocyclopentenones)

IT 75-52-5, reactions 78-92-2, 2-Butanol 97-86-9, Isobutyl methacrylate
 541-47-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(hair dyeing compns. containing oxocyclopentenenes)
 IT 17190-21-5P 30434-70-9P 58626-47-4P 58626-48-5P 109892-46-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (hair dyeing compns. containing oxocyclopentenenes)
 IT **608-08-2**
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. containing oxocyclopentenenes)
 RN 608-08-2 HCAPLUS
 CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)



L48 ANSWER 12 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:923229 HCAPLUS
 DN 136:58496
 ED Entered STN: 21 Dec 2001
 TI Hair dyeing **compositions** containing quinoxaline derivatives
 IN Gross, Wibke; Hoeffkes, Horst; Martin, Hans-Dieter; Moeller, Hinrich;
 Oberkobusch, Doris
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 22 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 28

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10029929	A1	20011220	DE 2000-10029929	20000617
	WO 2001097754	A2	20011227	WO 2001-EP6544	20010609
	WO 2001097754	A3	20020523		
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	EP 1292271	A2	20030319	EP 2001-957836	20010609
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
PRAI	DE 2000-10029929	A	20000617		
	WO 2001-EP6544	W	20010609		
OS	MARPAT 136:58496				
AB	Hair dye compns. contain at least one quinoxaline derivative containing e.g.,				
Cl-4	alkenyl, hydroxyalkyl, carboxyalkyl groups, and halo groups. Thus, 1,1,3-trimethylcyclo-2-penten[1,2-b]quinoxaline-2-carboxaldehyde (I) was prepared in a series of steps and formulated into a hair dye formulation containing I 4.4, Natrosol 250HR 2.0 and water to 100.0 g.				
ST	hair dye quinoxaline prepn				
IT	Amines, biological studies				

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aromatic, primary; hair dyeing compns. containing quinoxaline derivs.)

IT Nitriles, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aromatic; hair dyeing compns. containing quinoxaline derivs.)

IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aryl, secondary; hair dyeing compns. containing quinoxaline derivs.)

IT Amines, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (diamines, aromatic; hair dyeing compns. containing quinoxaline derivs.)

IT Hair preparations
 (dyes; hair dyeing compns. containing quinoxaline derivs.)

IT Shampoos
 (hair dyeing compns. containing quinoxaline derivs.)

IT Amino acids, biological studies
 Phenols, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. containing quinoxaline derivs.)

IT Collagens, biological studies
 Elastins
 Keratins
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hydrolyzates; hair dyeing compns. containing quinoxaline derivs.)

IT Peptides, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oligopeptides; hair dyeing compns. containing quinoxaline derivs.)

IT Protein hydrolyzates
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (soya; hair dyeing compns. containing quinoxaline derivs.)

IT Protein hydrolyzates
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (wheat gluten; hair dyeing compns. containing quinoxaline derivs.)

IT Glutens
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (wheat, hydrolyzates; hair dyeing compns. containing quinoxaline derivs.)

IT 56-87-1, L-Lysine, biological studies 59-48-3, Oxindol 59-92-7, DOPA,
 biological studies 60-18-4, L-Tyrosine, biological studies 62-53-3,
 Aniline, biological studies 63-91-2, L-Phenylalanine, biological studies
 65-49-6, 4-Aminosalicylic acid 67-52-7, Barbituric acid 70-26-8,
 L-Ornithine 71-00-1, L-Histidine, biological studies 73-22-3,
 L-Tryptophan, biological studies 74-79-3, Arginine, biological studies
 77-32-7 81-11-8, 4,4'-Diaminostilbene-2,2'-disulfonic acid 83-30-7,
 2,4,6-Trihydroxybenzoic acid 83-33-0, Indan-1-one 83-56-7,
 1,5-Dihydroxynaphthalene 84-65-1D, Anthraquinone, derivs. 87-02-5,
 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1, Pyrogallol
 88-21-1, 2-Aminobenzenesulfonic acid 88-74-4, 2-Nitroaniline 89-57-6,
 5-Aminosalicylic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1,
 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-
 hydroxynaphthalene-2,7-disulfonic acid 91-29-2, 4'-Amino-4-
 nitrodiphenylamine-2-sulfonic acid 92-44-4, 2,3-Dihydroxynaphthalene
 92-65-9 95-55-6, 2-Aminophenol 95-70-5 95-88-5 96-91-3,
 1-Hydroxy-2-amino-4,6-dinitrobenzene 96-93-5, 3-Amino-4-hydroxy-5-
 nitrobenzene sulfonic acid 98-37-3, 3-Amino-4-hydroxybenzenesulfonic
 acid 98-79-3, Pyrrolidone-5-carboxylic acid 99-05-8, 3-Aminobenzoic
 acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid
 99-50-3, 3,4-Dihydroxybenzoic acid 99-56-9, 1,2-Diamino-4-nitrobenzene
 100-01-6, 4-NitroAniline, biological studies 101-77-9,

4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenyl ether
102-32-9, 3,4-Dihydroxyphenylacetic acid 106-50-3, 1,4-Benzenediamine,
biological studies 107-95-9, β -Alanine 108-45-2,
1,3-Benzenediamine, biological studies 108-46-3, Resorcin, biological
studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucin
109-00-2, 3-Hydroxypyridine 110-85-0, Piperazidine, biological studies
110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological
studies 118-12-7, Fischer base 118-70-7, 4,5,6-Triaminopyrimidine
118-92-3, 2-Aminobenzoic acid 119-34-6, 4-Amino-2-nitrophenol
119-59-5, 4,4'-Diaminodiphenylsulfoxide 119-70-0, 4,4'-
Diaminodiphenylamine-2-sulfonic acid 119-72-2, 4-Amino-4'-nitrostilbene-
2,2'-disulfonic acid 120-80-9, 1,2-Benzenediol, biological studies
121-47-1, 3-Aminobenzenesulfonic acid 121-57-3, 4-Aminobenzenesulfonic
acid 123-30-8, 4-Aminophenol 123-31-9, Hydroquinone, biological
studies 123-75-1, Pyrrolidine, biological studies 139-65-1,
4,4'-Diaminodiphenylsulfide 141-84-4 141-86-6, 2,6-Diaminopyridine
142-08-5, 2-Hydroxypyridine 147-85-3, L-Proline, biological studies
149-91-7, Gallic acid, biological studies 150-13-0, 4-Aminobenzoic acid
150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 150-76-5,
4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 288-13-1, Pyrazole
288-32-4, Imidazol, biological studies 288-88-0, 1H-1,2,4-Triazole
452-58-4, 2,3-Diaminopyridine 462-08-8, 3-Aminopyridine 480-66-0
488-87-9, 2,5-Dimethylresorcin 496-73-1, 4-Methylresorcin 498-94-2,
Piperidine-4-carboxylic acid 498-95-3, Piperidine-3-carboxylic acid
500-85-6D, Indophenol, derivs. 504-15-4 504-17-6, Thiobarbituric acid
504-24-5, 4-Aminopyridine 504-29-0, 2-Aminopyridine 517-22-6,
2,4-Dimethyl-3-ethylpyrrole 531-86-2 533-31-3, 3,4-
Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone 535-75-1,
Piperidine-2-carboxylic acid 535-87-5, 3,5-Diaminobenzoic acid
537-65-5, 4,4'-Diaminodiphenylamine 553-86-6, Cumaranone 556-03-6,
Tyrosine 570-24-1, 6-Nitro-o-toluidine 578-66-5, 8-Aminoquinoline
580-17-6, 3-Aminoquinoline 580-22-3, 2-Aminoquinoline 582-17-2,
2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 603-81-6,
2,3-Diaminobenzoic acid 606-55-3 606-57-5, 2-Amino-1-nitronaphthalene
608-08-2, 3-Indoxylacetate 608-25-3, 2-Methylresorcin
610-74-2, 2,5-Diaminobenzoic acid 610-81-1, 4-Amino-3-nitrophenol
611-03-0, 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone
614-82-4, 2,4-Dihydroxyphenylacetic acid 615-66-7 615-71-4,
1,2,4-Triaminobenzene 616-45-5, Pyrrolidone 616-47-7,
1-Methylimidazole 619-05-6, 3,4-Diaminobenzoic acid 623-09-6,
4-Methylaminoaniline 626-64-2, 4-Hydroxypyridine 636-25-9,
2,5-Diaminophenol 876-87-9 934-22-5, 5-Aminobenzimidazole 1004-74-6,
2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-
Triaminopyrimidine 1123-55-3, 7-Aminobenzothiazole 1123-93-9,
5-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1197-55-3,
4-Aminophenylacetic acid 1455-77-2, 3,5-Diamino-1,2,4-triazole
1571-72-8, 3-Amino-4-hydroxybenzoic acid 1820-80-0, 3-Aminopyrazole
1953-54-4, 5-Hydroxyindole 2374-03-0, 4-Amino-3-hydroxybenzoic acid
2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1,
4-Hydroxyindole 2510-01-2, 1-Dicyanomethyleneindan 2654-52-6,
2,3-Dimethylbenzothiazolium tosylate 2785-06-0, 2,3-
Dimethylbenzothiazolium iodide 2835-95-2, 2-Methyl-5-aminophenol
2835-99-6 2871-01-4, HC Red 3 3131-52-0, 5,6-Dihydroxyindole
3158-63-2, 1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic
acid 3342-78-7, 2-Aminophenylacetic acid 3769-62-8, Gallion
3855-78-5, 2,3,4-Trimethylpyrrole 4318-76-7, 2,5-Diaminopyridine
4331-29-7, 7-Aminobenzimidazole 4506-66-5, 1,2,4,5-Tetraaminobenzene
tetrahydrochloride 4928-43-2, 2-Dimethylamino-5-aminopyridine

5007-67-0, 3,3',4,4'-Tetraaminobenzophenone 5099-39-8 5131-58-8
 5192-03-0, 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4,
 4-Aminoindole 5217-47-0, 1,3-Diethylthiobarbituric acid 5307-14-2,
 1,4-Diamino-2-nitrobenzene 5318-27-4, 6-Aminoindole 5345-47-1,
 2-Aminonicotinic acid 5392-28-9 5418-63-3, 1,2,3,3-Tetramethyl-3H-
 Indolium iodide 5434-20-8, 3-Aminophthalic acid 5718-83-2 5850-35-1,
 Acid blue 29 5930-28-9, 2,6-Dichloro-4-aminophenol 5959-52-4,
 3-Amino-2-naphthoic acid 6201-65-6 6222-46-4, Palatine chrome green GC
 6247-27-4, Mordant brown 4 6259-50-3, 6-Dimethylamino-4-hydroxy-2-
 naphthalenesulfonic acid 6358-09-4, 2-Amino-6-chloro-4-nitrophenol
 6399-72-0, 6-Amino-7-hydroxynaphthalene-2-sulfonic acid 6628-04-2,
 4-Aminoquinaldine 6967-12-0, 6-Aminoindazole 7411-49-6 7575-35-1
 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7,
 2-(2-Hydroxyethyl)phenol 10173-66-7, 1-Amino-4-nitro-2-(2-
 nitrobenzylideneamino)-benzene 13754-19-3, 4,5-Diaminopyrimidine
 14268-66-7, 3,4-Methylenedioxyaniline 14338-36-4, 3-Aminophenylacetic
 acid 16082-33-0, 3,5-Diaminopyrazole 16214-27-0, Indan-1,2-dione
 16859-86-2, 1,4-Dimethylquinolinium iodide 16867-03-1,
 2-Amino-3-hydroxypyridine 19335-11-6, 5-Aminoindazole 20103-09-7
 22715-34-0, 2-Hydroxy-4,5,6-Triaminopyrimidine 23244-87-3,
 2,4,5-Triaminopyridine 23894-07-7 24119-24-2, N,N-Bis[2-(4-
 aminophenoxy)ethyl]methylaniline trihydrochloride 24905-87-1, HC Red 7
 28020-38-4, 2,3-Diamino-6-methoxypyridine 28491-52-3 29539-03-5,
 5,6-Dihydroxyindoline 29705-39-3 31835-64-0, 3-Amino-3'-nitrobiphenyl
 34572-45-7, 2-Nitro-1-amino-4-bis(2-hydroxyethylamino)benzene 35011-47-3
 41946-53-6 42952-29-4 50610-28-1, 2-Chloro-5-nitro-N-hydroxyethyl-1,4-
 phenylenediamine 51387-92-9 55302-96-0 56932-44-6, HC Yellow 5
 58480-17-4 61224-35-9 61693-42-3, 3-Amino-2,4-dichlorophenol
 62496-02-0, 2-Methylamino-4,5,6-triaminopyrimidine 63886-74-8
 63969-46-0 64993-07-3 66566-48-1 66635-40-3, 4,4'-Diaminostilbene
 dihydrochloride 69825-83-8, 6-Nitro-2,5-diaminopyridine 70643-19-5,
 2,4-Diaminophenoxyethanol 71134-97-9 74918-21-1, 1,3-Bis(2,4-
 diaminophenoxy)propane tetrahydrochloride 77484-77-6,
 3-Amino-6-methylamino-2-nitropyridine 79352-72-0 82576-75-8, HC Violet
 1 83763-47-7 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine
 84540-50-1, 6-Methyl-3-amino-2-chlorophenol 85679-78-3,
 3,5-Diamino-2,6-dimethoxypyridine 85926-99-4, 4-Hydroxyindoline
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(**hair dyeing** compns. containing quinoxaline derivs.)

IT 90817-34-8 93841-24-8 93923-57-0 95576-89-9, HC Red 10
 104333-09-7, 2-Hydroxymethyl-4-aminophenol 110102-86-8,
 2-Methyl-5-amino-4-chlorophenol 110952-48-2 114402-54-9,
 1,3-Bis(4-aminophenylamino)propane 115423-86-4, 1,3-Diamino-2,4-
 dimethoxybenzene 117907-43-4 128729-30-6, 1,3-Bis(N-4-aminophenyl)2-
 hydroxyethylamino-2-propanol 130582-56-8, 1,3-Bis(4-aminophenylamino)2-
 propanol 137290-86-9 144644-13-3, 1,8-Bis(2,5-diaminophenoxy)-3,6-
 dioxaoctane tetrahydrochloride 155601-17-5, 4,5-Diamino-1-(2-
 hydroxyethyl)pyrazole 159661-42-4, 2,5-Dihydroxy-4-morpholinoaniline
 202525-71-1 202525-73-3, 2,4,5-Triaminophenol trihydrochloride
 202525-74-4, Pentaaminobenzene pentahydrochloride 202525-75-5,
 Hexaaminobenzene hexahydrochloride 202525-76-6, 2,4,6-Triaminoresorcin
 trihydrochloride 202525-77-7 202525-78-8, 4,6-Diaminopyrogallol
 dihydrochloride 202525-79-9 211872-02-5 215377-52-9,
 3,4-Methylenediaminoaniline 220118-56-9 223383-77-5,
 4-Amino-3-hydroxynaphthalenesulfonic acid 346593-13-3 380897-57-4
 380897-58-5 380897-59-6 380897-60-9 380897-61-0 380897-62-1
 380897-63-2 380897-64-3 380897-65-4 380897-66-5 380897-67-6
 380897-68-7 380897-69-8 380897-75-6 380897-77-8 380897-79-0

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. containing quinoxaline derivs.)

IT 380897-49-4P 380897-56-3P
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (hair dyeing compns. containing quinoxaline derivs.)

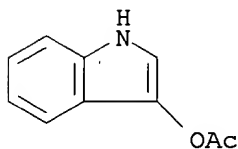
IT 78-92-2, 2-Butanol 95-54-5, 1,2-Benzenediamine, reactions 541-47-9
 4760-34-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (hair dyeing compns. containing quinoxaline derivs.)

IT 30434-70-9P 108946-70-9P 109892-46-8P 380897-50-7P 380897-51-8P
 380897-52-9P 380897-54-1P 380897-55-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (hair dyeing compns. containing quinoxaline derivs.)

IT **608-08-2**, 3-Indoxylacetate
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (**hair dyeing** compns. containing quinoxaline derivs.)

RN 608-08-2 HCAPLUS

CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)



L48 ANSWER 13 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:850669 HCAPLUS

DN 136:10872

ED Entered STN: 23 Nov 2001

TI Hair dyes containing derivatives of nitrosopyridine or nitrosopyrimidine

IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

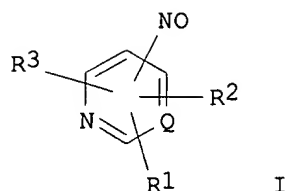
LA German

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10024886	A1	20011122	DE 2000-10024886	20000519
	WO 2001089587	A3	20020418	WO 2001-EP5339	20010510
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
PRAI	DE 2000-10024886	A	20000519		
OS	MARPAT 136:10872				
GI					



- AB The invention concerns hair dyes that contain nitrosopyridine or nitrosopyrimidine derivs. of the general formula (I), groups are defined, and a second dye that contains amino or hydroxy groups; the compns. color hair without the addition of oxidative agents. Thus violet red color was achieved by a **composition** that included 5 mmol 5-nitroso-2,4,6-triaminopyrimidine; 5 mmol 4-formyl-1-methylquinoline-p-toluene sulfate; 5 mmol piperidine, 1 drop of 20% fatty alkyl ether sulfate; 50 mL water; pH to 9 with sodium hydroxide and hydrochloric acid resp.
- ST hair dye nitrosopyridine nitrosopyrimidine
- IT Hair preparations
(dyes; hair dyes containing derivs. of nitrosopyridine or nitrosopyrimidine)
- IT pH
(hair dyes containing derivs. of nitrosopyridine or nitrosopyrimidine)
- IT Carbonates, biological studies
Caseins, biological studies
Elastins
Halides
Keratins
Phosphates, biological studies
Sulfates, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(hair dyes containing derivs. of nitrosopyridine or nitrosopyrimidine)
- IT Proteins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(soybean; hair dyes containing derivs. of nitrosopyridine or nitrosopyrimidine)
- IT 6247-27-4, Mordant Brown 4
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(Mordant Brown 4; hair dyes containing derivs. of nitrosopyridine or nitrosopyrimidine)
- IT 346684-81-9
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(Palatine Chrome Green; hair dyes containing derivs. of nitrosopyridine or nitrosopyrimidine)
- IT 50-21-5, Lactic acid, biological studies 56-87-1, L-Lysine, biological studies 59-48-3, Oxindol 59-92-7, DOPA, biological studies 60-18-4, L-Tyrosine, biological studies 63-91-2, L-Phenylalanine, biological studies 64-18-6D, Formic acid, derivs. 64-19-7, Acetic acid, biological studies 67-52-7, Barbituric acid 70-26-8, L-Ornithine 71-00-1, L-Histidine, biological studies 73-22-3, L-Tryptophane, biological studies 74-79-3, L-Arginine, biological studies 77-32-7 77-92-9, biological studies 79-09-4, Propionic acid, biological studies

79-14-1, Glycolic acid, biological studies 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-33-0, 1-Indanone 83-56-7, 1,5-Dihydroxynaphthalene 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-69-4, biological studies 88-74-4, 2-Nitroaniline 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 91-29-2, 4'-Amino-4-nitrodiphenylamine-2-sulfonic acid 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9, N-(2-Hydroxyethyl)-N-ethyl-p-phenylenediamine 95-54-5, o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluene 95-88-5, 4-Chlororesorcin 96-93-5, 3-Amino-4-hydroxy-5-nitrobenzene sulfonic acid 98-37-3, 3-Amino-4-hydroxybenzene sulfonic acid 98-79-3, Pyrrolidone-5-carboxylic acid 98-86-2, Acetophenon, biological studies 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 99-56-9, 1,2-Diamino-4-nitrobenzene 100-01-6, 4-Nitroaniline, biological studies 101-77-9, 4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenyl ether 103-82-2, 2-Phenylacetic acid, biological studies 106-50-3, p-Phenylenediamine, biological studies 107-92-6D, Butyric acid, derivs. 108-45-2, m-Phenylenediamine, biological studies 108-72-5, 1,3,5-Triaminobenzene 109-00-2, 3-Hydroxypyridine 110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological studies 118-12-7, 1,3,3-Trimethyl-2-methyleneindoline 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 119-34-6, 4-Amino-2-nitrophenol 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 121-57-3, 4-Aminobenzene sulfonic acid 123-30-8, 4-Aminophenol 141-84-4, Rhodanine 141-86-6, 2,6-Diamino-pyridine 142-08-5, 2-Hydroxypyridine 142-62-1, Hexanoic acid, biological studies 150-13-0, 4-Aminobenzoic acid 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 150-76-5, 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 288-32-4, Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole 289-95-2D, Pyrimidine, nitroso, derivs. 452-58-4, 2,3-Diamino-pyridine 462-08-8, 3-Amino-pyridine 488-87-9, 2,5-Dimethylresorcin 496-73-1, 4-Methylresorcin 498-94-2, Piperidine-4-carboxylic acid 504-15-4 504-17-6, Thiobarbituric acid 504-24-5, 4-Amino-pyridine 504-29-0, 2-Amino-pyridine 517-22-6, 2,4-Dimethyl-3-ethylpyrrole 526-95-4, D-Gluconic acid 533-31-3, 1,3-Benzodioxol-5-ol 535-75-1, Piperidine-2-carboxylic acid 553-86-6, Cumaranone 570-24-1, 6-Nitro-o-toluidine 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 580-22-3, 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 606-23-5, 1H-Indene-1,3(2H)-dione 606-55-3 606-57-5, 2-Amino-1-nitronaphthalene **608-08-2**, 3-Indoxylacetate 608-25-3, 2-Methylresorcin 609-20-1, 1,4-Benzenediamine, 2,6-dichloro- 611-98-3, 4,4'-Diaminobenzophenone 615-66-7, 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene 616-47-7, 1-Methylimidazole 623-09-6, 4-Methylaminoaniline 626-64-2, 4-Hydroxypyridine 636-25-9, 2,5-Diaminophenol 934-22-5, 5-Aminobenzimidazole 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1006-23-1, 5-Nitroso-2,4,6-triaminopyrimidine 1123-55-3, 7-Aminobenzothiazole 1123-93-9, 5-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1672-48-6 1820-80-0, 3-Aminopyrazole 1953-54-4, 5-Hydroxyindole 2209-72-5 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2387-48-6, 2,4-Diamino-6-hydroxy-5-nitrosopyrimidine 2510-01-2, 1-(Dicyanomethylene)indan 2654-52-6, 2,3-Dimethylbenzothiazolium-p-toluene sulfonate 2785-06-0, 2,3-Dimethylbenzothiazolium iodide 2835-95-2, 2-Methyl-5-aminophenol 2835-99-6, 3-Methyl-4-aminophenol

2871-01-4, HC Red 3 3131-52-0, 5,6-Dihydroxyindole 3158-63-2,
 1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic acid
 3247-56-1 3769-62-8, Gallion 3855-78-5, 2,3,4-Trimethylpyrrole
 4318-76-7, 2,5-Diamino-pyridine 4331-29-7, 7-Aminobenzimidazole
 4506-66-5, 1,2,4,5-Tetraaminobenzene-tetrahydrochloride 4928-43-2,
 2-Dimethylamino-5-amino-pyridine 5007-67-0, 3,3',4,4'-
 Tetraaminobenzophenone 5131-58-8 5192-03-0, 5-Aminoindole 5192-04-1,
 7-Aminoindole 5192-23-4, 4-Aminoindole 5217-47-0, 1,3-
 Diethylthiobarbituric acid 5307-14-2, 1,4-Diamino-2-nitrobenzene
 5318-27-4, 6-Aminoindole 5345-47-1, 2-Aminonicotinic acid 5418-63-3,
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 5930-28-9, 2,6-Dichloro-4-aminophenol 5959-52-4, 3-Amino-2-naphthoic
 acid 6201-65-6, 1,3-Benzenediol, 2-chloro- 6259-50-3,
 6-Dimethylamino-4-hydroxy-2-naphthalene sulfonic acid 6358-09-4,
 2-Amino-6-chloro-4-nitrophenol 6399-72-0, 6-Amino-7-hydroxynaphthalene-2-
 sulfonic acid 6628-04-2, 4-Aminoquinoline 6634-82-8,
 4-Amino-4'-nitrostilbene-2,2'-disulfonic acid, disodium salt 6967-12-0,
 6-Aminoindazole 7336-20-1 7411-49-6 7429-90-5D, Aluminum, salts
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 Magnesium, salts 7439-96-5D, Manganese, salts 7440-09-7D, Potassium,
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 7440-39-3D, Barium, salts 7440-48-4D, Cobalt, salts 7440-50-8D,
 Copper, salts 7440-66-6, Zinc, biological studies 7440-70-2D, Calcium,
 salts 7575-35-1, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 7749-47-5,
 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7, 2-(2-Hydroxyethyl)phenol
 10173-66-7 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7,
 3,4-Methylenedioxyaniline 15477-76-6D, Phosphonate, salts 16082-33-0,
 3,5-Diaminopyrazole 16859-86-2, 1,4-Dimethylquinoliniumiodide
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 N,N-Bis-[2-(4-aminophenoxy)ethyl]methylamine-trihydrochloride
 24905-87-1, HC Red 7 28020-38-4, 2,3-Diamino-6-methoxy-pyridine
 28491-52-3 29539-03-5, 5,6-Dihydroxyindoline 31835-64-0,
 3-Amino-3'-nitrobiphenyl 34572-45-7, 2-Nitro-1-amino-4-[bis(2-
 hydroxyethyl)amino]benzene 42952-29-4, 1-Ethyl-2-methylnaphtho[1,2-
 d]thiazolium-p-toluenesulfonate 50610-28-1, 2-Chloro-5-nitro-N-
 hydroxyethyl-1,4-phenylenediamine 51387-92-9 55302-96-0,
 2-Methyl-5-(2-hydroxyethylamino)phenol 55482-22-9 56932-44-6, HC
 Yellow 5 58480-17-4, 1,2-Dimethyl-naphtho[1,2-d]thiazolium-p-toluene
 sulfonate 59150-27-5 61224-35-9, 1,2,3,3-Tetramethyl-3H-indolium-p-
 toluenesulfonate 61693-42-3, 3-Amino-2,4-dichlorophenol 62496-02-0,
 2-Methylamino-4,5,6-triaminopyrimidine 63681-88-9 64993-07-3,
 5-Amino-6-nitrobenzo-1,3-dioxole 65291-83-0D, Nitrosopyridine, derivs.
 66635-40-3, 4,4'-Diaminostilbene-dihydrochloride 69825-83-8,
 6-Nitro-2,5-diaminopyridine 70643-19-5, 2,4-Diaminophenoxyethanol
 70700-44-6, 4-Hydroxy-2-dimethylamino-5-nitroso-6-aminopyrimidine
 74918-21-1, 1,3-Bis(2,4-diaminophenoxy)propane-tetrahydrochloride
 79352-72-0, 4-Amino-2-aminomethylphenol 82576-75-8, HC Violet 1
 83763-47-7, 2-Amino-4-(2-hydroxyethylamino)anisole 84540-47-6,
 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1, 6-Methyl-3-amino-2-
 chlorophenol 85679-78-3, 3,5-Diamino-2,6-dimethoxy-pyridine
 85926-99-4, 4-Hydroxyindoline 89033-55-6 89323-10-4,
 2,6-Diamino-3-nitrosopyridine 90817-34-8, 3-Amino-2-methylamino-6-
 methoxypyridine 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 93923-57-0
 95576-89-9, HC Red 10 104333-09-7, 2-Hydroxymethyl-4-aminophenol

110102-86-8, 2-Methyl-5-amino-4-chlorophenol 110952-48-2 114402-54-9,
1,3-Bis(4-aminophenylamino)propane 115423-86-4, 1,3-Diamino-2,4-
dimethoxybenzene 117907-43-4 128729-30-6, 1,3-Bis[N-(4-aminophenyl)-2-
hydroxyethylamino]-2-propanol 130582-56-8, 1,3-Bis(4-aminophenylamino)-2-
propanol 137290-86-9, 5-(2-Hydroxyethylamino)-4-methoxy-2-methylphenol
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(**hair dyes** containing derivs. of nitrosopyridine or
nitrosopyrimidine)

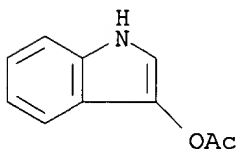
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tetrahydrochloride 159621-77-9, Benzeneethanol, 2,5-diamino-, sulfate
(salt) 159661-42-4, 2,5-Dihydroxy-4-morpholinoaniline 169381-75-3,
3,5-Pyridinediamine, 2,6-dimethoxy-, monohydrochloride 200617-91-0
202525-71-1, 2,5-Dihydroxy-4-morpholinoaniline-dihydrobromide
202525-73-3, 2,4,5-Triaminophenol-trihydrochloride 202525-74-4,
Pentaaminobenzenepentahydrochloride 202525-75-5, Hexaaminobenzene-
hexahydrochloride 202525-76-6, 2,4,6-Triaminoresorcin-trihydrochloride
202525-78-8, 4,6-Diaminopyrogallol-dihydrochloride 215377-52-9,
3,4-Methylenediaminoaniline 220118-56-9, 1,2,3,3-Tetramethyl-3H-indolium-
methanesulfonate 223383-77-5, 4-Amino-3-hydroxynaphthalene-sulfonic acid
223398-02-5 260981-02-0, N-(2-Methoxyethyl)-p-phenylenediamine
260981-03-1, 2,3-Dichloro-p-phenylenediamine 262853-93-0,
Piperidine-3-carboxylic acid 346593-13-3
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(**hair dyes** containing derivs. of nitrosopyridine or nitrosopyrimidine)

IT **608-08-2**, 3-Indoxylacetate
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

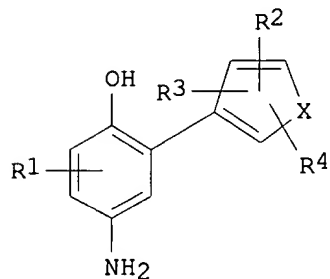
(**hair dyes** containing derivs. of nitrosopyridine or
nitrosopyrimidine)

RN 608-08-2 HCAPLUS
CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)



L48 ANSWER 14 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:833273 HCAPLUS
DN 135:376491
ED Entered STN: 16 Nov 2001
TI Hair dyes containing p-aminophenols
IN Chassot, Laurent; Braun, Hans-Juergen
PA Wella Aktiengesellschaft, Germany
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C07D207-32
ICS C07D307-42; C07D333-20; C07D333-22; C07D333-28; C07D333-36
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001085683	A2	20011115	WO 2001-EP2686	20010309
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 10022828	A1	20011122	DE 2000-10022828	20000510
	BR 2001006423	A	20020402	BR 2001-6423	20010309
	EP 1222166	A2	20020717	EP 2001-927718	20010309
	EP 1222166	B1	20030813		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	AT 247087	E	20030815	AT 2001-1927718	20010309
	JP 2003532707	T2	20031105	JP 2001-582284	20010309
	US 2003110577	A1	20030619	US 2002-30468	20020108
PRAI	DE 2000-10022828	A	20000510		
	WO 2001-EP2686	W	20010309		
OS	MARPAT 135:376491				
GI					



AB The invention concerns developer-coupler type oxidative hair dyes that contain at least one p-aminophenol derivative of the general formula (I) (R groups are defined), or their physiol. acceptable, water-soluble salts. Thus 4-amino-2-(3-thienyl)-phenol hydrochloride was synthesized in several steps. A hair dye **composition** was prepared that contained: 1.25 mmol 4-amino-2-(3-thienyl)-phenol as developer; 1.25 mmol 1,3-dihydroxy benzene as coupler; 1.0 g potassium oleate (8% aqueous solution); 1.0 g ammonia (22% aqueous solution); 1.0 ethanol; 0.3 g ascorbic acid; water to 100 g.

ST hair dye oxidative aminophenol deriv

IT Hair preparations
(dyes, oxidative; hair dyes containing p-aminophenols)

IT Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(p-aminophenols; hair dyes containing p-aminophenols)

IT 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol **91-56-5**, 2,3-Indolinedione 91-68-9, 3-Diethylaminophenol 92-44-4, 2,3-Dihydroxynaphthalene 95-88-5, 1-Chloro-2,4-dihydroxybenzene 99-07-0, 3-Dimethylaminophenol 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 137-19-9, 1,5-Dichloro-2,4-dihydroxybenzene 141-86-6, 2,6-Diaminopyridine 533-31-3, 3,4-Methylenedioxyphenol 575-38-2, 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-methylbenzene 619-05-6, 3,4-Diaminobenzoic acid 770-25-2, 3-[(2-Hydroxyethyl)amino]phenol 1953-54-4, 5-Hydroxyindole 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2, 5-Amino-2-methylphenol 3131-52-0, 5,6-Dihydroxyindole 5349-76-8 5697-02-9, 2-Methyl-1-naphthol-acetate 6201-65-6, 2-Chloro-1,3-dihydroxybenzene 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7228-00-4, 2-[(3-Hydroxyphenyl)amino]acetamide 14268-66-7, 3,4-Methylenedioxyaniline 16867-03-1, 2-Amino-3-hydroxypyridine 26011-57-4, 6-Amino-3,4-dihydro-1,4(2H)-benzoxazine 26021-57-8, 3,4-Dihydro-6-hydroxy-1,4(2H)-benzoxazine 28020-38-4, 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline 39489-79-7, 5-Amino-2,4-dichloro-phenol 53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-methylphenol 61693-42-3, 3-Amino-2,4-dichloro-phenol 70643-19-5, 2,4-Diamino-1-(2-hydroxyethoxy)benzene 71500-41-9, 4-Amino-2-di[(2-hydroxyethyl)amino]-1-ethoxybenzene 71500-42-0, 3-[Di(2-hydroxyethyl)amino]aniline 76045-64-2, 3-[(2-Aminoethyl)amino]aniline 78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene 80592-80-9, 3-[(2,3-Dihydroxypropyl)amino]-2-methylphenol 80592-81-0, 3-[(2-Hydroxyethyl)amino]-2-methylphenol 81892-72-0, 1,3-Di(2,4-diaminophenoxy)propane 83763-47-7, 2-Amino-4-[(2-Hydroxyethyl)amino]anisole 84540-48-7, 2,4-Diaminophenoxyacetic acid 84540-50-1, 3-Amino-2-chloro-6-methylphenol 86817-42-7, 2-(4-Amino-2-hydroxyphenoxy)ethanol 90817-34-8, 3-Amino-6-methoxy-2-(methylamino)pyridine 94082-77-6, 2,4-Diamino-1,5-di(2-hydroxyethoxy)benzene 104752-50-3, 1-(2-Aminoethoxy)-2,4-diaminobenzene 104752-51-4, 1,2-Dichloro-3,5-dihydroxy-4-methylbenzene 110102-86-8, 5-Amino-4-chloro-2-methylphenol 111451-24-2, 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-methylphenol 122481-67-8, 2,4-Di[(2-hydroxyethyl)amino]-1,5-dimethoxybenzene 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol 141614-04-2 141614-05-3, 2,4-Diamino-1-(2-hydroxyethoxy)-5-methylbenzene 141922-20-5 142082-56-2, 3-[(2-Methoxyethyl)amino]phenol 146658-65-3, 5-[(3-Hydroxypropyl)amino]-2-methylphenol 149330-25-6, 2,6-Bis(2-hydroxyethyl)aminotoluene 168092-23-7, Di(2,4-diaminophenoxy)methane 207923-07-7, 5-Amino-2-ethylphenol 244028-59-9, 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole 349649-42-9, Phenol, 4-Amino-2-(3-thienyl) 373643-48-2 373643-49-3 373643-50-6 373643-51-7 373643-52-8 373643-53-9 373643-54-0 373643-55-1 373643-56-2 373643-57-3 373643-58-4 373643-59-5 373643-60-8 373643-61-9 373643-62-0 373643-63-1 373643-64-2 373643-65-3 373643-66-4 373643-67-5 373643-72-2 373643-73-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing p-aminophenols)

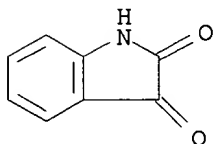
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 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (hair dyes containing p-aminophenols)

IT 107-30-2, Chloromethylmethylether 3188-13-4, Chloromethylethylether
 6165-69-1 10221-56-4 22037-28-1, 3-Bromofuran 30318-99-1,
 3-Bromo-4-methyl-thiophene 40032-73-3, 3-Bromo-2-chloro-thiophene
 54840-15-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (hair dyes containing p-aminophenols)

IT 5847-59-6P, 2-Bromo-4 nitrophenol 364598-99-2P 364599-00-8P
 365533-48-8P 373380-62-2P 373643-69-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (hair dyes containing p-aminophenols)

IT **91-56-5**, 2,3-Indolinedione
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (hair dyes containing p-aminophenols)

RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 15 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:747106 HCAPLUS
 DN 135:308558
 ED Entered STN: 12 Oct 2001
 TI Hair dye **compositions** containing p-aminophenol derivatives
 PA Wella AG, Germany
 SO Ger. Gebrauchsmusterschrift, 35 pp.
 CODEN: GGXXFR

DT Patent
 LA German
 IC ICM A61K007-13
 ICS C07F007-08
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 28

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 20110357	U1	20011011	DE 2001-20110357	20010622
PRAI	DE 2001-20110357		20010622		
OS	MARPAT 135:308558				

AB Various p-aminophenol derivs. or its water-soluble salts are useful for hair dye compns. which also contain couplers and developers. Thus, a **composition** contained 4-amino-2-pyridin-2-ylphenol-HCl 0.096, 5-methyl-2-methylphenol (coupler) 0.08, 3,4-methylenedioxyphenol (coupler) 0.018 and 2-amino-6-chloro-4-nitrophenol 0.04, 8% solution of potassium oleate 10.0, 22% aqueous NH₃ solution 10.0, EtOH 10.0, ascorbic acid 0.3, and water to 100.0 g. The **composition** conferred on the human hair a

copper gold color.

ST aminophenol hair dye; phenol amino hair dye; direct dye hair coupler
aminophenol

IT Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(amino; hair dye compns. containing aminophenol derivs.)

IT Dyes
(direct; hair dye compns. containing aminophenol derivs.)

IT Hair preparations
(dyes, oxidative; hair dye compns. containing aminophenol derivs.)

IT Hair preparations
(dyes; hair dye compns. containing aminophenol derivs.)

IT Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(hair dye compns. containing aminophenol derivs.)

IT Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(naphthols; hair dye compns. containing aminophenol derivs.)

IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(phenolic; hair dye compns. containing aminophenol derivs.)

IT 83-56-7, 1,5-Naphthalenediol 89-25-8 89-83-8 90-15-3, 1-Naphthalenol
91-56-5, 1H-Indole-2,3-dione 91-68-9 92-44-4,
2,3-Naphthalenediol 95-70-5 95-88-5 99-07-0 106-50-3,
1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine,
biological studies 108-46-3, 1,3-Benzenediol, biological studies
123-30-8 137-19-9 141-86-6, 2,6-Pyridinediamine 288-13-1D, Pyrazole,
amino derivs. 533-31-3, 1,3-Benzodioxol-5-ol 575-38-2,
1,7-Naphthalenediol 582-17-2, 2,7-Naphthalenediol 591-27-5 608-25-3
615-50-9 621-42-1 770-25-2 1004-74-6, Pyrimidinetetramine
1687-53-2 1953-54-4, 1H-Indol-5-ol 2380-84-9, 1H-Indol-7-ol
2380-86-1, 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol 2835-95-2
3131-52-0, 1H-Indole-5,6-diol 5349-76-8 5697-02-9 6265-21-0
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26011-57-4 26021-57-8 26455-21-0 28020-38-4 28365-08-4
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75513-65-4 76045-64-2 80592-81-0 80653-87-8 81329-90-0
81892-72-0 83763-47-7 83763-48-8 84540-47-6 84540-48-7
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94082-77-6 94158-14-2 104752-50-3 104752-51-4 110102-86-8
111451-24-2 115423-86-4 122455-85-0 122481-67-8 131657-78-8
137290-78-9 137290-86-9 139443-57-5 141614-04-2 141614-05-3
141922-20-5 142082-56-2 146658-65-3 149330-25-6 155601-30-2
168092-23-7 180156-45-0 207923-07-7 217311-43-8 307493-94-3
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365533-11-5	365533-12-6	365533-13-7	365533-14-8	365533-15-9
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365533-21-7	365533-22-8	365533-23-9	365533-24-0	365533-25-1
365533-26-2	365533-27-3	365533-28-4	365533-29-5	365533-30-8
365533-31-9	365533-32-0	365533-33-1	365533-34-2	365533-35-3
365533-36-4	365533-37-5	365533-38-6	365533-39-7	365533-40-0
365533-41-1	365533-42-2	365533-43-3	365533-44-4	365533-45-5
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RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye compns. containing aminophenol derivs.)

IT 365533-49-9P 365533-50-2P 365533-51-3P 365533-52-4P 365533-53-5P
365533-54-6P 365533-55-7P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(hair dye compns. containing aminophenol derivs.)

IT 109-04-6, 2-Bromopyridine 2439-85-2 3188-13-4, Chloromethyl ethyl ether 3430-17-9, 2-Bromo-3-methylpyridine 3510-66-5, 2-Bromo-5-methylpyridine 4595-60-2, 2-Bromopyrimidine 4926-28-7, 2-Bromo-4-methylpyridine 5315-25-3, 2-Bromo-6-methylpyridine 25015-63-8 35590-37-5, 5-Bromonicotinonitrile 54840-15-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(hair dye compns. containing aminophenol derivs.)

IT 364598-99-2P 364599-00-8P 365533-48-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(hair dye compns. containing aminophenol derivs.)

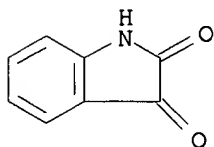
IT 91-56-5, 1H-Indole-2,3-dione

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye compns. containing aminophenol derivs.)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 16 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:729677 HCAPLUS

DN 135:288586

ED Entered STN: 05 Oct 2001

TI Preparation of (dihydroxyphenyl)acrylamide derivatives and compositions containing coloring agents

PA Wella AG, Germany

SO Ger. Gebrauchsmusterschrift, 52 pp.

CODEN: GGXXFR

DT Patent

LA German

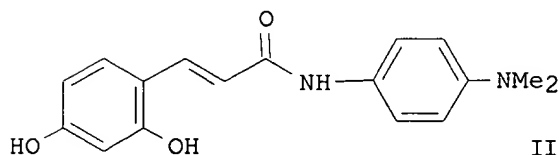
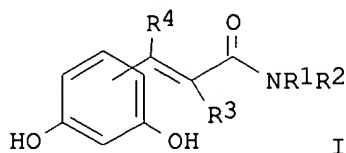
IC ICM C07C235-32

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

ICS A61K007-13; C07D295-04; C07D227-00
 CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 20110355	U1	20011004	DE 2001-20110355	20010622
PRAI	DE 2001-20110355		20010622		
OS	MARPAT 135:288586				
GI					



AB (m-dihydroxyphenyl)acrylamide derivs. I [R1, R2 = H, C1-2-alkoxy, C1-6-alkyl, C3-6-alkenyl, C2-4-hydroxyalkyl, C3-4-dihydroxyalkyl, C2-4-aminoalkyl, C2-4-dimethylaminoalkyl, C2-4-acetylaminoalkyl, C2-4-methoxyalkyl, C2-4-ethoxyalkyl, C1-4-cyanoalkyl, C1-4-carboxyalkyl, C1-4-aminocarbonylalkyl, pyridylmethyl, furfuryl, hydrogenated furfuryl, substituted pyridyl, CHR5CHR6R7, (un)substituted Ph, aminopyrazolyl; R1R2N = (un)substituted piperidine, morpholine, the formulpiperazine, pyrrolidine; R3, R4 = H, C1-4-alkyl; R5 = H, CO2H, CONH2; R6, R7 = H, OH, CONH2, CH2SMe, PH, hydroxyphenyl, morpholinyl, oxopyrrolidinyl, imidazolyl] or its physiol. compatible, water-soluble salts are claimed. Thus, 3-(2,4-dihydroxyphenyl)-N-[4-(dimethylamino)phenyl]acrylamide hydrochloride (II·HCl), was prepared from 2,4-(HO)2C6H4CHO, via hydroxyl group protection, Wittig with (MeO2C)CH:PPh3, saponification, amidation with 4-(Me2N)C6H4NH2 and deprotection. I were used in the preparation of hair dye formulations and their color tints noted.

ST dihydroxyphenylacrylamide deriv prepn coloring agent

IT Hair preparations
 (dyes, oxidative; preparation of (dihydroxyphenyl)acrylamide derivs. and compns. containing coloring agents)

IT Amides, biological studies
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)
 (phenylacrylic; preparation of (dihydroxyphenyl)acrylamide derivs. and compns. containing coloring agents)

IT Coloring materials
 Dyes
 Stains, coloring materials
 (preparation of (dihydroxyphenyl)acrylamide derivs. and compns. containing

coloring agents)

IT 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-57-6, 5-Aminosalicylic acid 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol **91-56-5**, 2,3-Indolinedione 91-68-9, 3-(Diethylamino)phenol 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 93-05-0, 4-(Diethylamino)aniline 95-55-6, 2-Aminophenol 95-70-5, 1,4-Diamino-2-methylbenzene 95-88-5, 1-Chloro-2,4-dihydroxybenzene 99-07-0, 3-(Dimethylamino)phenol 99-98-9, 4-(Dimethylamino)aniline 101-54-2, 4-(Phenylamino)aniline 106-50-3, 1,4-Diaminobenzene, uses 108-45-2, 1,3-Diaminobenzene, uses 108-46-3, 1,3-Dihydroxybenzene, uses 123-30-8, 4-Aminophenol 137-19-9 141-86-6, 2,6-Diaminopyridine 150-75-4, 4-(Methylamino)phenol 399-95-1, 4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluorophenol 533-31-3, 3,4-Methylenedioxyphenol 533-73-3, 1,2,4-Trihydroxybenzene 575-38-2, 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-methylbenzene 615-50-9 615-66-7, 2-Chloro-1,4-diaminobenzene 619-05-6, 3,4-Diaminobenzoic acid 770-25-2 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 2,5,6-Triamino-4(1H)-pyrimidinone 1630-11-1 1687-53-2, 5-Amino-2-methoxyphenol 1953-54-4, 5-Hydroxyindole 2359-52-6 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2, 5-Amino-2-methylphenol 2835-96-3, 4-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 3131-52-0, 5,6-Dihydroxyindole 4318-76-7, 2,5-Diaminopyridine 5306-96-7, 1,4-Diamino-2,3-dimethylbenzene 5349-76-8, 2,4-Diamino-1-methoxy-5-methylbenzene 5697-02-9, 2-Methyl-1-naphthyl acetate 5862-80-6 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline 6393-01-7, 1,4-Diamino-2,5-dimethylbenzene 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7218-02-2 7228-00-4 7469-77-4, 2-Methyl-1-naphthol 7575-35-1 16867-03-1, 2-Amino-3-hydroxypyridine 17672-22-9, 2-Amino-6-methylphenol 26011-57-4 26021-57-8 26455-21-0, N-[3-(Dimethylamino)phenyl]urea 28020-38-4, 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline 29785-47-5, 4-Amino-2-(methoxymethyl)phenol 39489-79-7, 5-Amino-2,4-dichlorophenol 45514-38-3 53222-92-7, 3-Amino-2-methylphenol 54381-16-7 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-methylphenol 61693-42-3, 3-Amino-2,4-dichlorophenol 66566-48-1, 4-[(2-Methoxyethyl)amino]aniline 67199-87-5 70643-19-5, 2,4-Diamino-1-(2-hydroxyethoxy)benzene 70643-20-8 71077-37-7 71500-41-9 71500-42-0 73793-80-3 74918-21-1, 1,3-Bis(2,4-diaminophenoxy)propane tetrahydrochloride 76045-64-2 78661-33-3 79352-72-0, 4-Amino-2-(aminomethyl)phenol 80592-80-9 80592-81-0 81892-72-0 83763-47-7, 2-Amino-4-[(2-hydroxyethyl)amino]anisole 83763-48-8 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine 84540-48-7 84540-50-1, 3-Amino-2-chloro-6-methylphenol 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 86817-42-7, 2-(4-Amino-2-hydroxyphenoxy)ethanol 90817-34-8, 3-Amino-6-methoxy-2-(methylamino)pyridine 93841-24-8, 1,4-Diamino-2-(2-hydroxyethyl)benzene 93841-25-9 94082-77-6 94158-14-2 97902-52-8, 1,4-Diamino-2-(1-methylethyl)benzene 104333-08-6 104333-09-7, 4-Amino-2-(hydroxymethyl)phenol 104752-48-9, 4-[(3-Hydroxypropyl)amino]aniline 104752-50-3 104752-51-4 105293-89-8 109942-17-8, [1,1'-Biphenyl]-2,5-diamine 110102-86-8, 5-Amino-4-chloro-2-methylphenol 110952-46-0 111451-24-2, 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-methylphenol 122481-67-8 126335-43-1 128729-30-6, 1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-propanol 130582-53-5 131657-78-8 135043-64-0, 4-Amino-2-(aminomethyl)phenol dihydrochloride

137290-78-9, 5-Amino-4-methoxy-2-methylphenol 137290-86-9,
 5-[(2-Hydroxyethyl)amino]-4-methoxy-2-methylphenol 139443-57-5,
 5-Amino-4-ethoxy-2-methylphenol 141614-04-2 141614-05-3,
 2,4-Diamino-1-(2-hydroxyethoxy)-5-methylbenzene 141922-20-5,
 2,4-Diamino-1-fluoro-5-methylbenzene 142082-56-2 146658-65-3
 149330-25-6 155601-16-4, 4,5-Diamino-1-(1-methylethyl)-1H-pyrazole
 155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)-1H-pyrazole 155601-30-2
 157469-54-0, 4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-pyrazole
 157469-55-1 159661-45-7, 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane
 168092-23-7 168202-61-7, 4-Amino-3-(hydroxymethyl)phenol 207568-58-9
 207923-07-7 217311-43-8 244028-59-9, 5-[(2-Hydroxyethyl)amino]-1,3-
 benzodioxole 244104-61-8 246244-41-7 306959-12-6 307493-94-3
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 364328-08-5

RL: NUU (Other use, unclassified); USES (Uses)

(oxidative hair dye component; preparation of

(dihydroxyphenyl)acrylamide derivs. and compns. containing coloring agents)

IT	111526-93-3P	128327-79-7P	364326-43-2P	364326-44-3P	364326-45-4P
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	364328-19-8P				

RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP

(Preparation); USES (Uses)

(oxidative hair dye component; preparation of (dihydroxyphenyl)acrylamide
 derivs. and compns. containing coloring agents)

IT 364328-20-1 364328-21-2

RL: NUU (Other use, unclassified); USES (Uses)

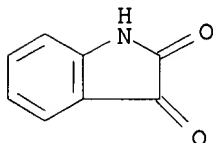
(preparation of (dihydroxyphenyl)acrylamide derivs. and compns. containing
 coloring agents)

IT 62-53-3, Aniline, reactions 74-89-5, Methylamine, reactions 95-01-2, 2,4-Dihydroxybenzaldehyde 99-57-0, 2-Hydroxy-5-nitroaniline 107-11-9, Allylamine 110-91-8, Morpholine, reactions 123-75-1, Pyrrolidine, reactions 141-43-5, (2-Hydroxyethyl)amine, reactions 498-63-5, 2-(Hydroxymethyl)pyrrolidine 616-30-8, 3-Amino-1,2-propanediol 1001-53-2, N-Acetyleneethylenediamine 2605-67-6, [(Methoxycarbonyl)methylene]triphenylphosphorane 5382-16-1, 4-Hydroxypiperidine 6315-89-5, 3,4-Dimethoxyaniline 6638-79-5, N,O-Dimethylhydroxylamine hydrochloride 6859-99-0, 3-Hydroxypiperidine 25739-59-7 25808-30-4, (Methylamino)acetonitrile hydrochloride 26153-38-8, 3,5-Dihydroxybenzaldehyde 40499-83-0, 3-Hydroxypyrrolidine 71026-66-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of (dihydroxyphenyl)acrylamide derivs. and compns. containing coloring agents)

IT 128837-29-6P 268233-10-9P, 3,5-Bis(ethoxymethoxy)benzaldehyde 364328-02-9P 364328-03-0P 364328-04-1P 364328-05-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of (dihydroxyphenyl)acrylamide derivs. and compns. containing coloring agents)

IT 91-56-5, 2,3-Indolinedione
 RL: NUU (Other use, unclassified); USES (Uses)
 (oxidative **hair dye** component; preparation of (dihydroxyphenyl)acrylamide derivs. and compns. containing coloring agents)

RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 17 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:676561 HCAPLUS
 DN 135:246997
 ED Entered STN: 14 Sep 2001
 TI Oxidation dyeing **composition** for keratinous fibers with a particular paraphenylenediamine derivative and a particular direct dyeing agent
 IN Lang, Gerard
 PA L'Oreal, Fr.
 SO PCT Int. Appl., 49 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001066068	A1	20010913	WO 2001-FR644	20010305
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,				

HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FR 2805741 A1 20010907 FR 2000-2862 20000306

FR 2805741 B1 20030620

BR 2001009021 A 20021126 BR 2001-9021 20010305

EP 1263397 A1 20021211 EP 2001-911846 20010305

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003528053 T2 20030924 JP 2001-564721 20010305

US 2003159221 A1 20030828 US 2003-333663 20030410

PRAI FR 2000-2862 A 20000306

WO 2001-FR644 W 20010305

OS MARPAT 135:246997

AB The invention concerns an oxidation dyeing **composition** for keratinous fibers, and in particular human keratinous fibers such as hair comprising, in a medium suitable for dyeing, at least an oxidation base selected among certain substituted paraphenylenediamine derivs. and their addition salts with an acid, and at least a synthetic direct dyeing agent selected among the azo, quinoid, triarylmethane, indoamino, azine dyes and/ or a natural dye. The invention also concerns a dyeing method using said **compn**. A hair dye **composition** contained 1-(4'-amino-3'-methylphenyl)-4-hydroxy-2-methyl-pyrrolidine dihydrochloride 0.837, 2,4-diamino-1-(β -hydroxyethyloxy)-benzene 0.723, Miranol A15 1, and water and excipients q.s. 100 g. Equal amount of above **composition** is mixed with 20 volume hydrogen peroxide and applied on the hair for 30 min, the hair is then rinsed, washed with a shampoo, rinsed and dried to obtain a blue color.

ST oxidative hair dye paraphenylenediamine direct dye

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal salts; oxidative hair dyes containing paraphenylenediamine derivs. direct dyes)

IT Polyelectrolytes

Surfactants

(amphoteric; oxidative hair dyes containing paraphenylenediamine derivs. direct dyes)

IT Surfactants

(anionic; oxidative hairdyes containing paraphenylenediamine derivs. direct dyes)

IT Polyelectrolytes

Surfactants

(cationic; oxidative hair dyes containing paraphenylenediamine derivs. direct dyes)

IT Dyes

(direct; oxidative hair dyes containing paraphenylenediamine derivs. direct dyes)

IT Hair preparations

(dyes, oxidative; oxidative hair dyes containing paraphenylenediamine derivs. direct dyes)

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fatty; oxidative hair dyes containing paraphenylenediamine derivs. direct

dyes)

IT Dyes
(natural; oxidative hair dyes containing paraphenylenediamine derivs.
direct dyes)

IT Surfactants
(nonionic; oxidative hair dyes containing paraphenylenediamine derivs.
direct dyes)

IT Salts, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(of peroxy acids; oxidative hair dyes containing paraphenylenediamine
derivs. direct dyes)

IT Solvents
(organic; oxidative hair dyes containing paraphenylenediamine derivs. direct
dyes)

IT Antioxidants
Azo dyes
Opacifiers
Oxidizing agents
Preservatives
Thickening agents
(oxidative hair dyes containing paraphenylenediamine derivs. direct dyes)

IT Acids, biological studies
Alkali metal hydroxides
Ceramides
Cyclosiloxanes
Enzymes, biological studies
Paraffin oils
Peroxysulfates
Polysiloxanes, biological studies
Vitamins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oxidative hair dyes containing paraphenylenediamine derivs. direct dyes)

IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(vegetable; oxidative hair dyes containing paraphenylenediamine derivs.
direct dyes)

IT 72-48-0, Alizarine 81-48-1, solvent violet 13 81-54-9, Purpurin
82-33-7 83-72-7, Lawsone 85-23-4, Spinulosin 89-25-8 90-15-3,
α Naphthol 91-56-5, Isatin 92-31-9, basic blue 17
95-54-5, 1,2-Benzenediamine, biological studies 95-55-6 95-70-5
95-88-5 106-50-3, 1,4-Benzenediamine, biological studies 108-26-9
108-45-2, 1,3-Benzenediamine, biological studies 108-45-2D,
1,3-Benzenediamine, derivs. 108-46-3, 1,3-Benzenediol, biological
studies 110-86-1D, Pyridine, derivs., biological studies 116-85-8,
disperse red 15 123-30-8 124-43-6 128-95-0, disperse violet 1
139-85-5 289-95-2D, Pyrimidine, derivs. 458-37-7, Curcumine
477-73-6, basic red 2 481-39-0, Juglone 533-31-3, Sesamol 533-31-3D,
Sesamol, derivs. 548-62-9, basic violet 3 569-77-7, Purpurogallin
587-98-4, acid yellow 36 591-27-5, 3-Aminophenol 608-25-3 632-99-5,
basic violet 14 633-03-4, basic green 1 633-96-5, acid orange 7
1151-98-0, Apigenidin 1220-94-6, disperse violet 4 1260-17-9, Carminic
acid 1320-07-6, acid orange 24 1694-09-3, acid violet 49 1934-21-0,
acid yellow 23 2380-86-1, 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol
2390-60-5, basic blue 7 2475-45-8, disperse blue 1 2475-46-9, disperse
blue 3 2580-56-5, basic blue 26 2650-18-2, acid blue 9 2706-28-7,

acid yellow 9 2835-95-2, 2-Methyl-5-aminophenol 2872-48-2, disperse
red 11 3179-90-6, disperse blue 7 3486-30-4, acid blue 7 3567-66-6,
acid red 33 4368-56-3, acid blue 62 4430-18-6, acid violet 43
4664-16-8 4770-37-0 5735-53-5D, Benzomorpholine, derivs. 6441-93-6
7469-77-4 7556-37-8 7575-35-1 7722-84-1, Hydrogen peroxide,
biological studies 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase
12217-41-3, basic blue 22 12221-52-2, basic red 22 13556-29-1
18499-92-8, Kermesic acid 20721-50-0, disperse black 9 22036-97-1
22366-99-0 23946-41-0 26381-41-9, basic brown 16 36118-45-3D,
Pyrazoline, derivs. 47569-30-2 52136-23-9 52136-25-1 55302-96-0
66422-95-5 68123-13-7, basic blue 99 68391-30-0, basic red 76
68391-31-1, basic yellow 57 68651-46-7, Indigo (dye) 69151-32-2
70643-19-5 80498-15-3, Laccase 83763-47-7 93841-24-8 99788-75-7
143525-61-5 143525-64-8 154442-49-6 171662-44-5 171662-53-6
176742-32-8, basic brown 17 200346-04-9 200346-06-1 200346-16-3
204700-85-6 227617-43-8 228268-53-9 228268-59-5 228268-69-7
228268-74-4 228268-76-6 228268-85-7 228268-87-9 228555-69-9
228555-73-5 228555-75-7 228555-77-9 228555-79-1 228555-81-5
228569-19-5 228569-22-0 228569-31-1 228569-39-9 228569-43-5
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359841-65-9 359841-66-0 359841-67-1 359841-68-2 359841-69-3
359850-56-9 359868-06-7 360069-60-9, C.I. Disperse Violet 15

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative **hair dyes** containing paraphenylenediamine
derivs. direct **dyes**)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

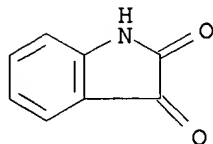
- (1) Anon; JP 11158048 A 1999 HCAPLUS
- (2) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
- (3) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
- (4) Henkel Kgaa; DE 19707545 A 1998 HCAPLUS
- (5) Oreal; EP 0673641 A 1995 HCAPLUS
- (6) Schwarzkopf GmbH Hans; DE 19728335 A 1998 HCAPLUS
- (7) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS

IT 91-56-5, Isatin

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative **hair dyes** containing paraphenylenediamine

derivs. direct **dyes**)
 RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 18 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:672048 HCAPLUS
 DN 135:246996
 ED Entered STN: 13 Sep 2001
 TI Preparation of 2,5-Diamino-benzaldehyde-derivates and their usage in hair dyes
 PA Wella A.-G., Germany
 SO Ger. Gebrauchsmusterschrift, 38 pp.
 CODEN: GGXXFR
 DT Patent
 LA German
 IC ICM C07C251-80
 ICS A61K007-13; C07C281-08; C07C337-04; C07C317-00; C07C327-28; C07C255-00
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 24

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 20108608	U1	20010913	DE 2001-20108608	20010523
PRAI	DE 2001-20108608		20010523		
OS	MARPAT 135:246996				

AB The invention concerns the synthesis of 2,5-Diamino-benzaldehyde-derivs. and their usage in hair dye compns. as developers along with coupling agents and optionally direct dyes. Thus a hair dye contained (g): 1,4-diamino-2-(piperidine-1-yl-iminomethyl)-benzene 0.30; 3-methyl-4-aminophenol 0.30; 1-naphthol 0.30; 1,3-dihydroxy benzene 0.18; potassium oleate 10.0; ammonia (22% solution) 10.0; ethanol 10; ascorbic acid 0.3; water to 100. Upon usage, 30 g of the **composition** were mixed with 30 g 6% hydrogen peroxide solution; after 30 min the dye was rinsed, the resulting color was reddish brown.

ST Diamino benzaldehyde derivs developer oxidative hair dye

IT Dyes
 (direct; preparation of 2,5-diamino-benzaldehyde-derivates and usage in hair dyes)

IT Hair preparations
 (dyes, oxidative; preparation of 2,5-diamino-benzaldehyde-derivates and usage in hair dyes)

IT 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol **91-56-5**, 2,3-Indolinedione 91-68-9, 3-Diethylamino-phenol 92-44-4, 2,3-Dihydroxynaphthalene 95-88-5, 1-Chloro-2,4-dihydroxybenzene 99-07-0, 3-Dimethylaminophenol 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 137-19-9, 1,3-Benzenediol, 4,6-dichloro 533-31-3,

3,4-Methylenedioxyphenol 575-38-2, 1,7-Dihydroxynaphthalene 582-17-2,
 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 608-25-3,
 1,3-Dihydroxy-2-methylbenzene 619-05-6, 3,4-Diamino-benzoic acid
 770-25-2 1687-53-2, 5-Amino-2-methoxyphenol 1953-54-4, 5-Hydroxyindole
 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1,
 4-Hydroxyindole 2835-95-2, 5-Amino-2-methylphenol 3131-52-0,
 5,6-Dihydroxyindole 5349-76-8, 2,4-Diamino-1-methoxy-5-methylbenzene
 5697-02-9, 1-Naphthalenol, 2-methyl-, acetate 6201-65-6,
 2-Chloro-1,3-dihydroxybenzene 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline
 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene
 7228-00-4 7469-77-4, 2-Methyl-1-naphthol 7722-84-1, Hydrogen peroxide,
 biological studies 14268-66-7, 3,4-Methylenedioxyaniline 16867-03-1,
 2-Amino-3-hydroxypyridine 26011-57-4, 6-Amino-3,4-dihydro-1,4(2H)benzoxazine
 26021-57-8, 3,4-Dihydro-6-hydroxy-1,4(2H)benzoxazine 28020-38-4,
 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline
 39489-79-7, 5-Amino-2,4-dichloro-phenol 53222-92-7, 3-Amino-2-methylphenol
 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-methylphenol 61693-42-3,
 3-Amino-2,4-dichloro-phenol 70643-19-5, 2,4-Diamino-1-(2-hydroxyethoxy)benzene
 71077-37-7 71500-41-9 71500-42-0 75513-65-4 76045-64-2 78661-33-3
 80592-80-9 80592-81-0 81892-72-0 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine
 84540-48-7 84540-50-1, 3-Amino-2-chloro-6-methylphenol 86817-42-7, 2-(4-Amino-2-hydroxyphenoxy)ethanol
 90817-34-8, 3-Amino-6-methoxy-2-(methylamino)pyridine 94082-77-6
 104752-50-3 104752-51-4, 1,3-Benzenediol, 4,5-dichloro-2-methyl 110102-86-8,
 5-Amino-4-chloro-2-methylphenol 111451-24-2, 2,6-Diamino-3,5-dimethoxypyridine
 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-methylphenol
 137290-78-9, 5-Amino-4-methoxy-2-methylphenol 137290-86-9, 5-[(2-Hydroxyethyl)amino]-4-methoxy-2-methylphenol
 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol 141614-04-2, 1,3-Benzenediamine,
 4-ethoxy-6-methyl- 141614-05-3, 2,4-Diamino-1-(2-hydroxyethoxy)-5-methylbenzene
 142082-56-2 146658-65-3 168092-23-7 207923-07-7, Phenol, 5-amino-2-ethyl-
 244028-59-9, 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole 307493-94-3 359866-26-5
 359866-36-7

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(preparation of 2,5-diamino-benzaldehyde-derivates and usage in **hair dyes**)

IT 359866-18-5P

RL: BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 2,5-diamino-benzaldehyde-derivates and usage in hair dyes)

IT 359865-88-6P 359865-89-7P 359865-90-0P 359865-91-1P 359865-92-2P
 359865-93-3P 359865-94-4P 359865-95-5P 359865-96-6P 359865-97-7P
 359865-98-8P 359865-99-9P 359866-00-5P 359866-01-6P 359866-02-7P
 359866-03-8P 359866-04-9P 359866-06-1P 359866-07-2P 359866-08-3P
 359866-09-4P 359866-10-7P 359866-11-8P 359866-12-9P 359866-13-0P
 359866-14-1P 359866-15-2P 359866-16-3P 359866-17-4P 359866-20-9P
 359866-22-1P 359866-24-3P 360067-94-3P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,5-diamino-benzaldehyde-derivates and usage in hair dyes)

IT 54-85-3, Isonicotinic acid hydrazide 75-04-7, Ethylamine, reactions
 80-17-1, Benzene sulfonic acid hydrazide 100-63-0, Phenylhydrazine
 368-78-5, 3-Trifluoromethyl phenylhydrazine 536-40-3, 4-Chlorobenzoic

acid hydrazide 536-89-0, m-Tolylhydrazine 537-47-3,
 4-Phenylsemicarbazide 553-53-7, Nicotinic acid hydrazide 606-26-8,
 2-Nitro benzoic acid hydrazide 613-94-5, Benzoic acid hydrazide
 618-40-6, N-Methyl-N-phenylhydrazine 636-97-5, 4-Nitro benzoic acid
 hydrazide 637-80-9, Hydrazineacetic acid ethylester 936-02-7,
 2-Hydroxy benzoic acid hydrazide 1068-57-1, Acetic acid hydrazide
 1576-35-8, Toluene-4-sulfonic acid hydrazide 2213-43-6,
 Piperidine-1-amine 2361-27-5, Thiophene-2-carboxylic acid hydrazide
 3326-71-4, Furan-2-carboxylic acid hydrazide 3619-22-5, 4-Methyl benzoic
 acid hydrazide 4114-31-2, Hydrazinecarboxylic acid ethyl ester
 4319-49-7, Morpholine-4-amine 5351-23-5, 4-Hydroxybenzoic acid hydrazide
 5351-69-9, 4-Phenylthiosemicarbazide 5814-05-1, 2-Chlorobenzoic acid
 hydrazide 6304-39-8, Caprylic acid hydrazide 13431-34-0,
 4-Ethylthiosemicarbazide 21185-13-7, 1-Methylthiosemicarbazide
 24424-99-5, Di-tert-butyl-dicarbonate 60075-23-2, (3,4-Dimethoxyphenyl)
 acetic acid hydrazide 97108-50-4, 2,5-Difluorophenylhydrazine
 187035-29-6, 2-Methoxymethyl-pyrrolidin-1-amine 244104-66-3
 359866-37-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 2,5-diamino-benzaldehyde-derivates and usage in hair dyes)

IT 244104-65-2P 325953-36-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(preparation of 2,5-diamino-benzaldehyde-derivates and usage in hair dyes)

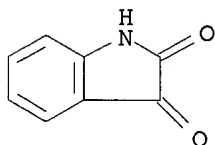
IT 91-56-5, 2,3-Indolinedione

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(preparation of 2,5-diamino-benzaldehyde-derivates and usage in **hair
 dyes**)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 19 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:115124 HCAPLUS

DN 134:183272

ED Entered STN: 15 Feb 2001

TI Quaternized azafluorenones for dyeing hair fibers

IN Moller, Hinrich; Oberkobusch, Doris; Hoffkes, Horst

PA Henkel Kommanditgesellschaft auf Aktien, Germany

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM C07D221-06

ICS A61K007-13

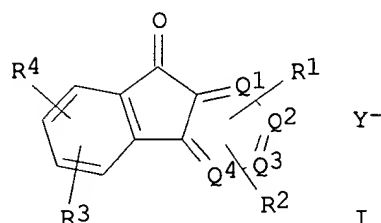
CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

PI WO 2001010840 A1 20010215 WO 2000-EP7226 20000727
W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE
DE 19937301 A1 20010215 DE 1999-19937301 19990806
EP 1198457 A1 20020424 EP 2000-958303 20000727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL
PRAI DE 1999-19937301 A 19990806
WO 2000-EP7226 W 20000727
OS MARPAT 134:183272
GI



AB Hair dyeing compns. contain quaternized azafluorenones (I, where R1, R2, R3 and R4 = e.g., H, halo, C1-4 alkyl or alkoxy group or hydroxyalkoxy, OH, NO2 NH2; Q1, Q2, Q3 and Q4, in total, represent 3 C atoms and a quaternary nitrogen atom which carries C1-4 alkyl or hydroxyalkyl or carboxyalkyl or sulfoalkyl groups, aryl, aralkyl or a heteroaryl group; and Y- = halo, C1-4 alkyl sulfate or alkanesulfonate, sulfate, or tetrafluoroborate). These compds. are suitable for dyeing fibers containing keratin, especially human hair. Thus, 1-methyl-5-oxoindeno[1,2-b]pyridinium trifluoromethanesulfonate (II) was prepared starting from 1-methyl-5-oxoindeno[1,2-b]pyridine-4-azafluoren-9-one and Me trifluoromethanesulfonate. A **composition** containing II and 2,4,5,6-tetraminopyrimidine sulfate gave a dark brown color to hair.

ST quaternized azafluorenone hair dye prepn

IT Surfactants
(anionic; quaternized azafluorenones for dyeing hair fibers)

IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(aromatic, primary; quaternized azafluorenones for dyeing hair fibers)

IT Nitriles, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(aromatic; quaternized azafluorenones for dyeing hair fibers)

IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(aryl, secondary; quaternized azafluorenones for dyeing hair fibers)

IT Hair preparations
(dyes; quaternized azafluorenones for dyeing hair fibers)

IT Surfactants
(nonionic; quaternized azafluorenones for dyeing hair fibers)

IT Shampoos
(quaternized azafluorenones for dyeing hair fibers)

IT Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (quaternized azafluorenones for dyeing hair fibers)

IT Surfactants
 (zwitterionic; quaternized azafluorenones for dyeing hair fibers)

IT 28020-38-4
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (quaternized azafluorenones for dyeing hair fibers)

IT 59-48-3 62-53-3, Benzenamine, biological studies 65-49-6 67-52-7,
 2,4,6(1H,3H,5H)-Pyrimidinetrione 77-32-7 81-11-8 83-30-7 83-56-7,
 1,5-Naphthalenediol 87-02-5 87-66-1, 1,2,3-Benzenetriol 88-21-1
 89-57-6 89-86-1 90-05-1 90-15-3, 1-Naphthalenol 90-20-0 92-44-4,
 2,3-Naphthalenediol 92-65-9 95-54-5, 1,2-Benzenediamine, biological
 studies 95-55-6 95-70-5 95-88-5 98-37-3 99-05-8 99-07-0
 99-31-0 99-50-3 100-01-6, biological studies 101-77-9 101-80-4
 102-32-9 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2,
 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol,
 biological studies 108-72-5, 1,3,5-Benzenetriamine 108-73-6,
 1,3,5-Benzenetriol 116-63-2 118-12-7 118-70-7, 4,5,6-
 Pyrimidinetriamine 118-92-3 119-59-5 119-70-0 120-80-9,
 1,2-Benzenediol, biological studies 121-47-1 121-57-3 123-30-8
 123-31-9, 1,4-Benzenediol, biological studies 139-65-1 141-84-4
 141-86-6, 2,6-Pyridinediamine 149-91-7, biological studies 150-13-0
 150-19-6 150-75-4 150-76-5 156-81-0, 2,4-Pyrimidinediamine
 288-88-0, 1H-1,2,4-Triazole 452-58-4, 2,3-Pyridinediamine 462-08-8,
 3-Pyridinamine 480-66-0 488-87-9 496-73-1 504-15-4 504-17-6
 504-24-5, 4-Pyridinamine 504-29-0, 2-Pyridinamine 517-22-6 533-31-3,
 1,3-Benzodioxol-5-ol 533-73-3, 1,2,4-Benzenetriol 535-87-5 537-65-5
 578-66-5, 8-Quinolinamine 580-17-6, 3-Quinolinamine 580-22-3,
 2-Quinolinamine 582-17-2, 2,7-Naphthalenediol 591-27-5 603-81-6
 606-55-3 **608-08-2** 608-25-3 610-74-2 611-03-0 611-98-3
 614-82-4 615-50-9 615-66-7 615-71-4, 1,2,4-Benzenetriamine
 619-05-6 623-09-6 636-25-9 876-87-9 934-22-5, 1H-Benzimidazol-5-
 amine 1004-74-6, Pyrimidinetetramine 1004-75-7 1123-55-3,
 7-Benzothiazolamine 1123-93-9, 5-Benzothiazolamine 1125-60-6,
 5-Isoquinolinamine 1197-55-3 1571-72-8 1820-80-0, 1H-Pyrazol-3-amine
 1953-54-4, 1H-Indol-5-ol 2374-03-0 2380-84-9, 1H-Indol-7-ol
 2380-86-1, 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol 2654-52-6
 2785-06-0 2835-95-2 2835-99-6 2871-01-4 3131-52-0,
 1H-Indole-5,6-diol 3158-63-2 3167-49-5 3342-78-7 3855-78-5
 4318-76-7, 2,5-Pyridinediamine 4331-29-7, 1H-Benzimidazol-4-amine
 4506-66-5 4928-43-2 5007-67-0 5131-58-8 5192-03-0,
 1H-Indol-5-amine 5192-04-1, 1H-Indol-7-amine 5192-23-4,
 1H-Indol-4-amine 5217-47-0 5318-27-4, 1H-Indol-6-amine 5345-47-1
 5392-28-9 5418-63-3 5434-20-8 5718-83-2 5930-28-9 5959-52-4
 6201-65-6 6259-50-3 6358-09-4 6399-72-0 6628-04-2 6967-12-0,
 1H-Indazol-6-amine **7169-34-8**, 3(2H)-Benzofuranone 7336-20-1
 7411-49-6 7575-35-1 7749-47-5 7768-28-7 13754-19-3,
 4,5-Pyrimidinediamine 14268-66-7, 1,3-Benzodioxol-5-amine 14338-36-4
 16082-33-0, 1H-Pyrazole-3,5-diamine 16859-86-2 16867-03-1
 19335-11-6, 1H-Indazol-5-amine 22715-34-0 23244-87-3,
 2,4,5-Pyridinetriamine 23894-07-7 24119-24-2 28491-52-3 29539-03-5
 29705-39-3 41927-50-8 50610-28-1 51387-92-9 53760-27-3
 54381-16-7 55302-96-0 56216-28-5 61224-35-9 61693-42-3
 62496-02-0 66635-40-3 70643-19-5 74918-21-1 79352-72-0
 83732-72-3 83763-47-7 84540-47-6 84540-50-1 85679-78-3

85926-99-4 90817-34-8 93841-24-8 93841-25-9 104333-09-7
 110102-86-8 110952-48-2 114402-54-9 115423-86-4 117907-43-4
 126335-41-9 128729-30-6 130582-56-8 135043-64-0 137290-86-9
 144644-13-3 159661-42-4 202525-71-1 202525-73-3 202525-74-4
 202525-75-5 202525-76-6 202525-77-7 202525-78-8 202525-79-9
 215377-52-9 220118-56-9 320728-23-2 320728-25-4 320728-27-6
 320728-29-8 325958-39-2D, salts 325958-40-5D, salts 325958-41-6D,
 salts 325958-42-7D, salts 325958-43-8D, salts 325958-44-9D, salts
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(quaternized azafluorenones for **dyeing hair** fibers)
 IT 3882-46-0, 5H-Indeno[1,2-b]pyridin-5-one
 RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
 study); RACT (Reactant or reagent); USES (Uses)
 (quaternized azafluorenones for dyeing hair fibers)
 IT 325958-45-0P
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (quaternized azafluorenones for dyeing hair fibers)
 IT 333-27-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (quaternized azafluorenones for dyeing hair fibers)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

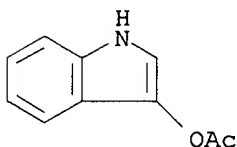
- (1) Abramenko, P; HCAPLUS
- (2) Abramenko, P; ZH VSES KHIM O-VA 1983, V28(3), P349 HCAPLUS
- (3) Basf Ag; DE 2051318 A 1972 HCAPLUS
- (4) Bristol Myers Co; EP 0758547 A 1997 HCAPLUS
- (5) Kloc; HCAPLUS
- (6) Kloc; CAN J CHEM 1979, V57(12), P1506 HCAPLUS
- (7) L'Oréal; FR 1430089 A
- (8) Mardenborough; HCAPLUS
- (9) Mardenborough; MED CHEM RES 1999, V9(2), P118 HCAPLUS
- (10) Merck & Co Inc; WO 9409002 A 1994 HCAPLUS
- (11) Prostakov, N; HCAPLUS
- (12) Prostakov, N; HCAPLUS
- (13) Prostakov, N; KHIM GETEROTSIKL SOEDIN 1972, 9, P1220 HCAPLUS
- (14) Prostakov, N; KHIM GETEROTSIKL SOEDIN 1983, 2, P252 HCAPLUS
- (15) Sandoz Ag; CH 616441 A 1980 HCAPLUS
- (16) Sandoz Sa; FR 2073388 A 1971 HCAPLUS
- (17) Zanderons, A; HCAPLUS
- (18) Zanderons, A; KHIM GETEROTSIKL SOEDIN 1986, 1, P88 HCAPLUS

IT 608-08-2 7169-34-8, 3(2H)-Benzofuranone
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(quaternized azafluorenones for **dyeing hair** fibers)

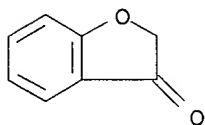
RN 608-08-2 HCAPLUS

CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)



RN 7169-34-8 HCAPLUS

CN 3(2H)-Benzofuranone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L48 ANSWER 20 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:96869 HCAPLUS
 DN 134:152366
 ED Entered STN: 08 Feb 2001
 TI Hair dye **compositions** containing aromatic aldehydes or ketones
 IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 16 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19936911	A1	20010208	DE 1999-19936911	19990805
	WO 2001013866	A1	20010301	WO 2000-EP7163	20000802
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1200051	A1	20020502	EP 2000-963997	20000802
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	JP 2003514767	T2	20030422	JP 2001-518006	20000802
PRAI	DE 1999-19936911	A	19990805		
	WO 2000-EP7163	W	20000802		
OS	MARPAT 134:152366				
AB	Hair dyeing compns. contain a combination of aromatic aldehydes and/or ketones with and heterocyclic compds., e.g., quinolinium salts, benzothiazolium salts, and color strengthening agents such as piperidine, pyrrolidine, and pyrazole. Thus, a mixture of 4-dimethylaminobenzaldehyde and 1-ethyl-2-methylquinolinium iodide containing piperidine at a pH of 9.0 gave a violet-red color to the hair.				
ST	hair dye arom aldehyde ketone; ethylmethylquinolinium iodide dimethylaminobenzaldehyde piperidine hair dye; quinolinium iodide benzaldehyde piperidine hair dye				
IT	Aldehydes, biological studies Ketones, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (aromatic; hair dye compns. containing aromatic aldehydes or ketones)				
IT	Hair preparations (dyes; hair dye compns. containing aromatic aldehydes or ketones)				
IT	59-48-3 67-52-7, Barbituric acid 71-00-1, Histidine, biological studies 84-65-1D, Anthraquinone, derivs. 84-83-3 100-10-7 109-00-2, 3-Pyridinol 110-85-0, Piperazidine, biological studies				

110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological studies 117-92-0 120-21-8 123-75-1, Pyrrolidine, biological studies 141-84-4 142-08-5, 2(1H)-Pyridinone 147-85-3, Proline, biological studies 149-87-1 288-13-1, Pyrazole 288-32-4, Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole 487-89-8, 1H-Indole-3-carboxaldehyde 498-94-2, 4-Piperidinecarboxylic acid 498-95-3, 3-Piperidinecarboxylic acid 500-85-6D, Indophenol, derivs. 504-17-6, ThioBarbituric acid 535-75-1, 2-Piperidinecarboxylic acid 579-72-6 606-23-5, 1H-Indene-1,3(2H)-dione 606-55-3 616-45-5, Pyrrolidone 616-47-7 626-64-2, 4-Pyridinol 1199-59-3 1204-86-0 1424-66-4 1971-81-9 2124-31-4 2156-29-8 3158-63-2 3785-01-1 3785-05-5 3859-41-4, 1,3-Cyclopentanedione 3915-61-5 4181-05-9 5217-47-0 5718-83-2, Rhodanine 3-acetic acid 6203-18-5 6285-94-5 **7169-34-8**, Coumaranone 7570-45-8 10040-98-9 10338-57-5 14933-76-7 18241-33-3D, salts 18241-35-5D, salts 18241-36-6D, salts 18241-37-7D, salts 18241-44-6D, salts 19012-03-4 20327-08-6 23302-83-2 24235-06-1 28141-13-1 31905-57-4, Nitrophenylenediamine 33985-71-6 40265-71-2D, salts 41602-56-6 41927-50-8 42846-14-0D, salts 42846-15-1D, salts 42846-19-5D, salts 42846-38-8D, salts 42922-08-7D, salts 42952-29-4 43093-74-9, Nitroaminophenol 46149-03-5D, salts 46297-20-5D, salts 50571-73-8D, salts 50579-67-4D, salts 50580-50-2D, salts 51980-54-2 56405-37-9 58028-76-5 60126-37-6D, salts 63149-01-9 63149-33-7 84562-48-1 90134-10-4 96196-21-3 97807-64-2 194099-39-3 323575-81-1 323575-82-2 323575-83-3 323575-84-4 323575-89-9D, halide and sulfonate salts

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**hair dye** compns. containing aromatic aldehydes or ketones)

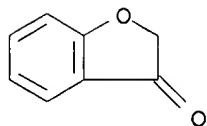
IT **7169-34-8**, Coumaranone

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**hair dye** compns. containing aromatic aldehydes or ketones)

RN 7169-34-8 HCAPLUS

CN 3(2H)-Benzofuranone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L48 ANSWER 21 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:93897 HCAPLUS

DN 134:168045

ED Entered STN: 08 Feb 2001

TI Hair dye **compositions** containing aromatic aldehydes or ketones

IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT Patent

LA German

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 27

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19936912	A1	20010208	DE 1999-19936912	19990805
	WO 2001010398	A1	20010215	WO 2000-EP7164	20000726
	W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1200049	A1	20020502	EP 2000-956288	20000726
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
PRAI	DE 1999-19936912	A	19990805		
	WO 2000-EP7164	W	20000726		
OS	MARPAT 134:168045				
AB	Hair dyeing compns. contain a combination of aromatic or heteroarom. aldehydes and/or ketones with and heterocyclic compds. and e.g., amino phenols, amines, aromatic nitriles. Thus, mixture of 1-methyl-4-[2-(4-formylphenyl)ethenyl]quinolinium Me sulfate and 2,5-diaminotoluene sulfate gave a brown-orange color to the hair.				
ST	hair dye arom aldehyde ketone				
IT	Phenols, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(amino; hair dye compns. containing aromatic aldehydes or ketones)				
IT	Amines, biological studies				
	Nitriles, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(aromatic; hair dye compns. containing aromatic aldehydes or ketones)				
IT	Amines, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(aryl, secondary; hair dye compns. containing aromatic aldehydes or ketones)				
IT	Hair preparations				
	(dyes; hair dye compns. containing aromatic aldehydes or ketones)				
IT	Phenols, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(hair dye compns. containing aromatic aldehydes or ketones)				
IT	Amines, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(phenolic; hair dye compns. containing aromatic aldehydes or ketones)				
IT	Amines, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(primary; hair dye compns. containing aromatic aldehydes or ketones)				
IT	Amines, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(secondary; hair dye compns. containing aromatic aldehydes or ketones)				
IT	59-48-3, Oxindole 62-53-3D, Aniline, derivs. 65-49-6, 4-Aminosalicylic acid 67-52-7, Barbituric acid 77-32-7 81-11-8, 4,4'-Diaminostilbene-2,2'-disulfonic acid 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-56-7, 1,5-Dihydroxynaphthalene 87-02-5 87-66-1, Pyrogallol 88-21-1,				

2-Aminobenzenesulfonic acid 89-57-6, 5-Aminosalicylic acid 89-86-1,
2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol
90-20-0 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 95-54-5,
o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5,
2,5-Diaminotoluene 95-88-5 98-37-3, 3-Amino-4-hydroxybenzenesulfonic
acid 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol
99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid
100-01-6, 4-Nitroaniline, biological studies 101-77-9,
4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenylether
102-32-9, 3,4-Dihydroxyphenylacetic acid 106-50-3, p-Phenylenediamine,
biological studies 108-45-2, 1,3-Benzenediamine, biological studies
108-46-3, Resorcin, biological studies 108-72-5, 1,3,5-Triaminobenzene
108-73-6, Phloroglucin 116-63-2 118-12-7, 1,3,3-Trimethyl-2-
methyleneindoline 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3,
2-Aminobenzoic acid 119-59-5, 4,4'-Diaminodiphenylsulfoxide 119-70-0,
4,4'-Diaminodiphenylamine-2-sulfonic acid 120-80-9, Pyrocatechol,
biological studies 121-47-1, 3-Aminobenzenesulfonic acid 121-57-3,
4-Aminobenzenesulfonic acid 123-30-8, 4-Aminophenol 123-31-9,
Hydroquinone, biological studies 139-65-1, 4,4'-Diaminodiphenylsulfide
141-84-4, Rhodanine 141-86-6, 2,6-Diaminopyridine 149-91-7, Gallic
acid, biological studies 150-13-0, 4-Aminobenzoic acid 150-19-6,
3-Methoxyphenol 150-75-4 150-76-5, 4-Methoxyphenol 156-81-0,
2,4-Diaminopyrimidine 452-58-4, 2,3-Diaminopyridine 462-08-8,
3-Aminopyridine 480-66-0 488-87-9, 2,5-Dimethylresorcin 496-73-1
504-15-4 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine
504-29-0, 02-Aminopyridine 517-22-6, 2,4-Dimethyl-3-ethylpyrrole
533-31-3, 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone
535-87-5, 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenylamine
578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 580-22-3,
2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5,
3-Aminophenol 603-81-6, 2,3-Diaminobenzoic acid 606-55-3,
1-Ethylquinaldinium iodide **608-08-2**, 3-Indoxylacetate
608-25-3, 2-Methylresorcin 610-74-2, 2,5-Diaminobenzoic acid 611-03-0,
2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone 614-82-4,
2,4-Dihydroxyphenylacetic acid 615-50-9 615-66-7 615-71-4,
1,2,4-Triaminobenzene 619-05-6, 3,4-Diaminobenzoic acid 623-09-6
636-25-9, 2,5-Diaminophenol 876-87-9, 1-Methylquinaldinium iodide
934-22-5, 5-Aminobenzimidazole 1004-74-6, 2,4,5,6-Tetraaminopyrimidine
1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1123-55-3,
7-Aminobenzothiazole 1123-93-9, 5-Aminobenzothiazole 1125-60-6,
5-Aminoisoquinoline 1197-55-3, 4-Aminophenylacetic acid 1455-77-2,
3,5-Diamino-1,2,4-triazole 1571-72-8 1820-80-0, 3-Aminopyrazole
1953-54-4, 5-Hydroxyindole 2374-03-0 2380-84-9, 7-Hydroxyindole
2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2654-52-6
2785-06-0, 2,3-Dimethylbenzothiazolium iodide 2835-95-2 2835-99-6
2871-01-4 3131-52-0, 5,6-Dihydroxyindole 3158-63-2,
1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic acid
3342-78-7, 2-Aminophenylacetic acid 3855-78-5, 2,3,4-Trimethylpyrrole
4318-76-7, 2,5-Diaminopyridine 4331-29-7, 7-Aminobenzimidazole
4506-66-5, 1,2,4,5-Tetraaminobenzene tetrahydrochloride 4928-43-2,
2-Dimethylamino-5-aminopyridine 5007-67-0, 3,3',4,4'-
Tetraaminobenzophenone 5131-58-8 5192-03-0, 5-Aminoindole 5192-04-1,
7-Aminoindole 5192-23-4, 4-Aminoindole 5217-47-0, 1,3-
Diethylthiobarbituric acid 5318-27-4, 6-Aminoindole 5345-47-1,
2-Aminonicotinic acid 5392-28-9 5418-63-3, 1,2,3,3-Tetramethyl-3H-
indolium iodide 5434-20-8, 3-Aminophthalic acid 5718-83-2,
Rhodanine-3-acetic acid 5930-28-9 5959-52-4 6201-65-6 6259-50-3,
6-Dimethylamino-4-hydroxy-2-naphthalenesulfonic acid 6358-09-4,

2-Amino-6-chloro-4-nitrophenol 6399-72-0 6628-04-2, 4-Aminoquinaldine
 6967-12-0, 6-Aminoindazole **7169-34-8**, Coumaranone 7336-20-1
 7411-49-6 7575-35-1 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine
 7768-28-7 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7,
 1,3-Benzodioxol-5-amine 14338-36-4, 3-Aminophenylacetic acid
 16082-33-0, 3,5-Diaminopyrazole 16859-86-2, 1,4-Dimethylquinolinium
 iodide 16867-03-1, 2-Amino-3-hydroxypyridine 19335-11-6,
 5-Aminoindazole 20103-09-7 22715-34-0, 2-Hydroxy-4,5,6-
 triaminopyrimidine 23244-87-3, 2,4,5-Triaminopyridine 23894-07-7,
 3,6-Dihydroxy-2,7-naphthalenedisulfonic acid 24119-24-2 28020-38-4
 28491-52-3 29539-03-5, 5,6-Dihydroxyindoline 29705-39-3 41927-50-8
 41946-53-6 42952-29-4, 1-Ethyl-2-methylnaphtho[1,2-d]thiazolium
 p-toluenesulfonate 50610-28-1 51387-92-9 53760-27-3 54381-16-7
 55302-96-0 56216-28-5 58480-17-4, 1,2-Dimethylnaphtho[1,2-d]thiazolium
 p-toluenesulfonate 61224-35-9 61693-42-3 62496-02-0,
 2-Methylamino-4,5,6-triaminopyrimidine 66566-48-1 66635-40-3,
 4,4'-Diaminostilbene dihydrochloride 70643-19-5, 2,4-
 Diaminophenoxyethanol 73264-13-8D, salts 74918-21-1 74991-01-8D,
 salts 75722-39-3D, salts 77523-60-5D, salts 79352-72-0 83732-72-3
 83763-47-7, 2-Amino-4-(2-hydroxyethylamino)anisole 84540-47-6,
 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1 85679-78-3 85926-99-4,
 4-Hydroxyindoline 90817-34-8 93841-24-8 104333-09-7 110102-86-8
 110952-48-2 114402-54-9 115423-86-4 117907-43-4 128729-30-6
 130582-56-8 135043-64-0 137290-86-9 159661-42-4,
 2,5-Dihydroxy-4-morpholinoaniline 169381-74-2 202525-71-1
 202525-73-3, 2,4,5-Triaminophenol trihydrochloride 202525-74-4,
 Pentaaminobenzene pentahydrochloride 202525-75-5, Hexaaminobenzene
 hexahydrochloride 202525-76-6 202525-78-8, 4,6-Diaminopyrogallol
 dihydrochloride 215377-52-9 324757-53-1D, salts 324757-55-3D, salts
 324757-56-4D, salts 324757-57-5D, salts 324757-58-6D, salts
 324757-59-7D, salts 324757-60-0D, salts 324757-63-3 324757-64-4
 324757-66-6

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(hair dye compns. containing aromatic aldehydes or
 ketones)

IT 89868-58-6P 89868-60-0P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation); USES (Uses)

(hair dye compns. containing aromatic aldehydes or ketones)

IT 108-89-4, γ -Picoline 623-27-8, 1,4-Benzenedicarboxaldehyde

RL: RCT (Reactant); RACT (Reactant or reagent)

(hair dye compns. containing aromatic aldehydes or ketones)

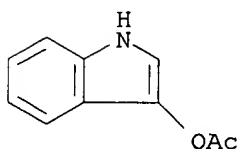
IT **608-08-2**, 3-Indoxylacetate **7169-34-8**, Coumaranone

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

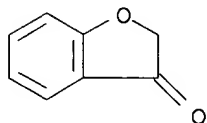
(hair dye compns. containing aromatic aldehydes or
 ketones)

RN 608-08-2 HCAPLUS

CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)

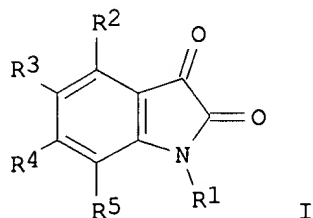


RN 7169-34-8 HCAPLUS
CN 3(2H)-Benzofuranone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L48 ANSWER 22 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:50450 HCAPLUS
DN 134:120571
ED Entered STN: 19 Jan 2001
TI Hair dye **compositions** containing N-vinylisatins
IN Rose, David
PA Henkel Kommanditgesellschaft auf Aktien, Germany
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM A61K007-13
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001003660	A1	20010118	WO 2000-EP6218	20000704
	W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 19932567	A1	20010118	DE 1999-19932567	19990713
	EP 1194116	A1	20020410	EP 2000-943979	20000704
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	DE 1999-19932567	A	19990713		
	WO 2000-EP6218	W	20000704		
OS	MARPAT 134:120571				
GI					



AB The invention relates to an agent for dyeing fibers containing keratin, especially human hair, containing at least 1 N-vinyl isatin (I, e.g., R1 = vinyl, or substituted by 1 or 2 C1-4 alkyl groups and R2, R3, R4 and R5 = H, OH,

halo, NO₂, sulfo, CO₂H, C1-4 alkyl or alkoxy groups). Thus, hair treated with N-vinylisatins and 2-aminomethyl-4-aminophenol turned orange.

ST hair dye vinylisatin phenol; isatin vinyl phenol hair dye

IT Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (amino; hair dye compns. containing N-vinylisatins)

IT Surfactants
 (anionic; hair dye compns. containing N-vinylisatins)

IT Nitriles, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (aromatic; hair dye compns. containing N-vinylisatins)

IT Hair preparations
 (dyes, oxidative; hair dye compns. containing N-vinylisatins)

IT Hair preparations
 (dyes; hair dye compns. containing N-vinylisatins)

IT Shampoos
 (hair dye compns. containing N-vinylisatins)

IT Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (hair dye compns. containing N-vinylisatins)

IT Surfactants
 (nonionic; hair dye compns. containing N-vinylisatins)

IT Amines, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (phenolic; hair dye compns. containing N-vinylisatins)

IT Surfactants
 (zwitterionic; hair dye compns. containing N-vinylisatins)

IT 59-48-3 62-53-3, Benzenamine, biological studies 65-49-6 67-52-7, 2,4,6(1H,3H,5H)-Pyrimidinetrione 77-32-7 83-30-7 83-56-7, 1,5-Naphthalenediol 87-02-5 87-66-1, 1,2,3-Benzenetriol 88-21-1 89-57-6 89-86-1 90-15-3, 1-Naphthalenol 90-20-0 92-44-4, 2,3-Naphthalenediol 93-05-0 94-53-1, 1,3-Benzodioxole-5-carboxylic acid 95-54-5, 1,2-Benzenediamine, biological studies 95-55-6 95-70-5 95-88-5 98-37-3 99-05-8 99-31-0 99-50-3 99-64-9 100-01-6, biological studies 100-09-4 101-77-9 101-80-4 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 108-72-5, 1,3,5-Benzenetriamine 108-73-6, 1,3,5-Benzenetriol 118-12-7 118-70-7, 4,5,6-Pyrimidinetriamine 118-92-3 119-59-5 119-70-0 120-80-9, 1,2-Benzenediol, biological studies 121-47-1 121-57-3 123-30-8 123-31-9, 1,4-Benzenediol, biological studies 139-65-1 141-84-4 141-86-6, 2,6-Pyridinediamine 149-91-7, biological studies 150-13-0 150-19-6 150-75-4 156-81-0, 2,4-Pyrimidinediamine 452-58-4, 2,3-Pyridinediamine 462-08-8, 3-Pyridinamine 480-66-0 488-87-9 496-73-1 504-15-4 504-17-6 504-24-5, 4-Pyridinamine 504-29-0, 2-Pyridinamine 517-22-6 533-31-3, 1,3-Benzodioxol-5-ol 533-73-3, 1,2,4-Benzenetriol 535-87-5 537-65-5 553-86-6, 2(3H)-Benzofuranone 578-66-5, 8-Quinolinamine 579-75-9 580-17-6, 3-Quinolinamine 580-22-3, 2-Quinolinamine 582-17-2, 2,7-Naphthalenediol 586-38-9 591-27-5 603-81-6 606-55-3 608-08-2 608-25-3 610-74-2 611-03-0 611-98-3 615-66-7 615-71-4, 1,2,4-Benzenetriamine 619-05-6 623-09-6 636-25-9 876-87-9 934-22-5, 1H-Benzimidazol-5-amine 1004-74-6, Pyrimidinetetramine 1004-75-7 1125-60-6, 5-Isoquinolinamine

1197-55-3 1455-77-2, 1H-1,2,4-Triazole-3,5-diamine 1571-72-8
 1820-80-0, 1H-Pyrazol-3-amine 1953-54-4, 1H-Indol-5-ol 2374-03-0
 2380-84-9, 1H-Indol-7-ol 2380-86-1, 1H-Indol-6-ol 2380-94-1,
 1H-Indol-4-ol 2592-14-5 2654-52-6 2785-06-0 2835-95-2 2835-99-6
 2871-01-4 3131-52-0, 1H-Indole-5,6-diol 3158-63-2 3167-49-5
 3342-78-7 3855-78-5 4318-76-7, 2,5-Pyridinediamine 4331-29-7,
 1H-Benzimidazol-4-amine 4506-66-5 4928-43-2 5007-67-0 5131-58-8
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 5418-63-3 5434-20-8 5718-83-2 5930-28-9 5959-52-4 6201-65-6
 6259-50-3 6358-09-4 6399-72-0 6628-04-2 6967-12-0,
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 13754-19-3, 4,5-Pyrimidinediamine 14268-66-7, 1,3-Benzodioxol-5-amine
 14338-36-4 16082-33-0, 1H-Pyrazole-3,5-diamine 16859-86-2 16867-03-1
 19335-11-6, 1H-Indazol-5-amine 22715-34-0 23244-87-3,
 2,4,5-Pyridinetriamine 23894-07-7 24119-24-2 28020-38-4 29539-03-5
 29705-39-3 41927-50-8 50610-28-1 51387-92-9 53666-79-8
 55302-96-0 61224-35-9 61693-42-3 62496-02-0 66635-40-3
69564-74-5D, derivs. 70643-19-5 79352-72-0 83763-47-7
 84540-47-6 84540-50-1 85679-78-3 85926-99-4 90817-34-8
 93841-24-8 104333-09-7 110102-86-8 110952-48-2 114402-54-9
 115423-86-4 117907-43-4 126335-41-9 128729-30-6 130582-56-8
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 202525-73-3 202525-74-4 202525-75-5 202525-76-6 202525-77-7
 202525-78-8 202525-79-9 215377-52-9 220118-56-9 320728-23-2
 320728-25-4 320728-27-6 320728-29-8 320729-29-1 320730-08-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(**hair dye** compns. containing N-vinylisatins)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Bayer, E; DE 2725379 A 1978 HCAPLUS
- (2) Henkel KGAA; EP 0868902 A 1998 HCAPLUS
- (3) Henkel KGAA; DE 19717282 A 1998 HCAPLUS
- (4) Henkel KGAA; DE 19859723 A 2000 HCAPLUS
- (5) Hoeffkes, H; US 5743919 A 1998 HCAPLUS

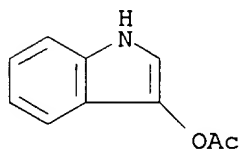
IT **608-08-2 69564-74-5D**, derivs.

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(**hair dye** compns. containing N-vinylisatins)

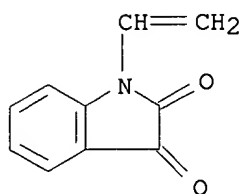
RN 608-08-2 HCAPLUS

CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)



RN 69564-74-5 HCAPLUS

CN 1H-Indole-2,3-dione, 1-ethenyl- (9CI) (CA INDEX NAME)



L48 ANSWER 23 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:880595 HCAPLUS

DN 134:46626

ED Entered STN: 15 Dec 2000

TI Hair dye **compositions** containing xanthenes

IN Moeller, Hinrich; Meinigke, Bernd

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM C09B011-28

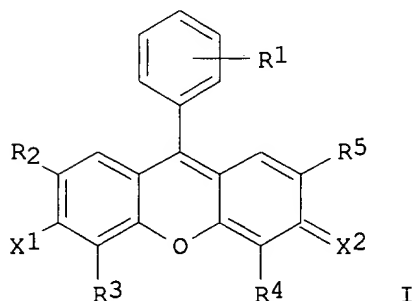
ICS A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19926377	A1	20001214	DE 1999-19926377	19990610
	WO 2000076466	A1	20001221	WO 2000-EP5044	20000602
	W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	DE 1999-19926377	A	19990610		
OS	MARPAT 134:46626				
GI					



AB A hair dye **composition** comprises a xanthene derivative (I, R1 = e.g., H, C1-4 carboxyl or a sulfone; R2, R3, R4, and R5 = H, C1-4 alkyl, C1-4 alkoxy or OH; when X2 = O, then X1 = OH). Addnl. the comps. contains compds. with amino, aminocarboxylate or amino hydroxy groups, N heterocycles, etc. A formulation containing pyrogallol red,

2,5-diaminotoluene sulfate (1:1) and a surfactant dyed the hair fibers medium brown.

ST xanthene hair dye oxidative; amino phenol xanthene hair dye

IT Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (amino; hair dye compns. containing xanthenes)

IT Surfactants
 (anionic; hair dye compns. containing xanthenes)

IT Nitriles, biological studies
 Nitro compounds
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (aromatic; hair dye compns. containing xanthenes)

IT Hair preparations
 (dyes, oxidative; hair dye compns. containing xanthenes)

IT Hair preparations
 (dyes; hair dye compns. containing xanthenes)

IT Amino acids, biological studies
 Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (hair dye compns. containing xanthenes)

IT Aromatic compounds
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (nitro; hair dye compns. containing xanthenes)

IT Surfactants
 (nonionic; hair dye compns. containing xanthenes)

IT Peptides, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oligopeptides; hair dye compns. containing xanthenes)

IT Amines, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (phenolic; hair dye compns. containing xanthenes)

IT Amines, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (primary; hair dye compns. containing xanthenes)

IT Amines, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (secondary; hair dye compns. containing xanthenes)

IT Surfactants
 (zwitterionic; hair dye compns. containing xanthenes)

IT 59-48-3 62-53-3, Benzenamine, biological studies 62-53-3D, Aniline, derivs. 65-49-6 67-52-7, 2,4,6(1H,3H,5H)-Pyrimidinetrione 81-11-8 81-88-9, Rhodamine B 83-30-7 83-56-7, 1,5-Naphthalenediol 84-65-1D, Anthraquinone, derivs. 87-02-5 87-66-1, 1,2,3-Benzenetriol 88-21-1 89-57-6 89-86-1 90-05-1 90-15-3, 1-Naphthalenol 90-20-0 92-44-4, 2,3-Naphthalenediol 92-65-9 92-83-1D, Xanthene, derivs. 95-54-5, 1,2-Benzenediamine, biological studies 95-55-6 95-70-5 95-88-5 98-37-3 98-86-2, biological studies 99-05-8 99-07-0 99-31-0 99-50-3 100-01-6, biological studies 101-77-9 101-80-4 102-32-9 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol,

biological studies 108-72-5, 1,3,5-Benzenetriamine 108-73-6,
 1,3,5-Benzenetriol 116-63-2 118-12-7 118-70-7, 4,5,6-
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 141-86-6, 2,6-Pyridinediamine 149-91-7, biological studies 150-13-0
 150-19-6 150-75-4 150-76-5 156-81-0, 2,4-Pyrimidinediamine
 288-88-0, 1H-1,2,4-Triazole 452-58-4, 2,3-Pyridinediamine 462-08-8,
 3-Pyridinamine 488-87-9 496-73-1 500-85-6D, Indophenol, derivs.
 504-15-4 504-17-6 504-24-5, 4-Pyridinamine 504-29-0, 2-Pyridinamine
 517-22-6 533-31-3, 1,3-Benzodioxol-5-ol 533-73-3, 1,2,4-Benzenetriol
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 8-Quinolinamine 580-17-6, 3-Quinolinamine 580-22-3, 2-Quinolinamine
 582-17-2, 2,7-Naphthalenediol 591-27-5 603-81-6 606-55-3
608-08-2 608-25-3 610-74-2 611-03-0 611-98-3 614-82-4
 615-50-9 615-66-7 615-71-4, 1,2,4-Benzenetriamine 619-05-6
 623-09-6 636-25-9 876-87-9 934-22-5, 1H-Benzimidazol-5-amine
 975-17-7 989-38-8, Rhodamine 6G 1004-74-6, Pyrimidinetetramine
 1004-75-7 1123-55-3, 7-Benzothiazolamine 1123-93-9,
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 1571-72-8 1820-80-0, 1H-Pyrazol-3-amine 1953-54-4, 1H-Indol-5-ol
 2321-07-5, Fluorescein 2374-03-0 2380-84-9, 1H-Indol-7-ol 2380-86-1,
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 32638-88-3, Pyrogallol red 41927-50-8 41946-53-6 50610-28-1
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 61693-42-3 62496-02-0 62669-77-6, Rhodamine 116 perchlorate
 64339-18-0, Rhodamine 101 66566-48-1 66635-40-3 70643-19-5
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 84540-47-6 84540-50-1 85679-78-3 85926-99-4 90817-34-8
 93841-24-8 93841-25-9 104333-09-7 110102-86-8 114402-54-9
 115423-86-4 117907-43-4 126335-41-9 128729-30-6 130582-56-8
 137290-86-9 144644-13-3 159661-42-4 202525-71-1 202525-73-3
 202525-74-4 202525-75-5 202525-76-6 202525-77-7 202525-78-8
 202525-79-9 215377-52-9 220118-56-9 312958-14-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(hair dye compns. containing xanthenes)

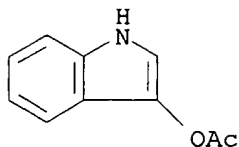
IT **608-08-2**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(hair dye compns. containing xanthenes)

RN 608-08-2 HCAPLUS

CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)



L48 ANSWER 24 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:456848 HCAPLUS
 DN 133:79012
 ED Entered STN: 07 Jul 2000
 TI Hair dye preparation containing an aliphatic cationic amine, an aldehyde, a ketone, a quinone, di-imino-isoindoline, or 3-amino-isoindolone derivatives
 IN Lagrange, Alain; Andrean, Herve
 PA L'oreal, Fr.
 SO PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000038641	A1	20000706	WO 1999-FR3248	19991222
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2787706	A1	20000630	FR 1998-16377	19981223
	FR 2787706	B1	20020614		
	CA 2321876	AA	20000706	CA 1999-2321876	19991222
	EP 1056435	A1	20001206	EP 1999-961142	19991222
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002533373	T2	20021008	JP 2000-590595	19991222
	US 6451067	B1	20020917	US 2000-622666	20001027
PRAI	FR 1998-16377	A	19981223		
	WO 1999-FR3248	W	19991222		
OS	MARPAT 133:79012				
AB	The invention concerns the use, for dyeing keratinous fibers, of at least an aliphatic cationic amine and a aldehyde or ketone or quinone or di-imino-isoindoline or 3-amino-iso-indolone derivs. for dyeing, by reaction without oxidizing agent, said keratinous fibers. The invention also concerns dyeing compns. comprising said compds. and dyeing agents using them. A hair dye composition contained 1H-indole-2,3-dione 0.441, 3-[3-(4-aminophenylamino)propyl]-1-methyl-3H-imidazolium chloride.HCl 1.02, Et alc. 20, triethanolamine q.s. pH = 7, and water q.s. 100 g. The composition is applied on the hair at the rate of 5 g/g of hair, then rinsed, and dried to obtain a brownish red color.				
ST	hair dye aliph cationic amine aldehyde; ketone quinone iminoisoindoline aminoisoindolone hair dye				
IT	Amines, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				

(aliphatic, cationic; hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

IT Hair preparations
(dyes; hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

IT Glycols, uses
Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(ethers; hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

IT Ethers, uses
Ethers, uses
RL: NUU (Other use, unclassified); USES (Uses)
(glycol; hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

IT Aldehydes, biological studies
Ketones, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

IT Alcohols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

IT Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

IT **91-56-5**, 1H-Indole-2,3-dione 106-51-4, Quinone, biological studies **2058-74-4**, 1-Methyl-1H-Indole-2,3-dione 3468-11-9 14352-51-3D, derivs. 220158-81-6 220158-86-1
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**hair dye** preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

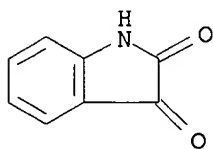
RE

- (1) Henkel Kgaa; DE 4314317 A 1994 HCAPLUS
- (2) Henkel Kgaa; DE 4409143 A 1995 HCAPLUS
- (3) L'Oreal; GB 2181750 A 1987 HCAPLUS
- (4) L'Oreal; EP 0502783 A 1992 HCAPLUS
- (5) L'Oreal; EP 0847749 A 1998 HCAPLUS

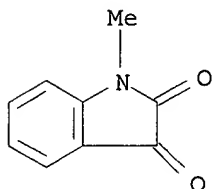
IT **91-56-5**, 1H-Indole-2,3-dione **2058-74-4**, 1-Methyl-1H-Indole-2,3-dione
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**hair dye** preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, diimino-isoindoline, or amino-isoindolone derivs.)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



RN 2058-74-4 HCAPLUS
CN 1H-Indole-2,3-dione, 1-methyl- (9CI) (CA INDEX NAME)



L48 ANSWER 25 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:456847 HCAPLUS
DN 133:79011
ED Entered STN: 07 Jul 2000
TI Hair dye preparation containing an aliphatic cationic amine, an aldehyde, a ketone, a quinone, or di-imino-isoindoline or 3-amino-isoindolone derivatives
IN Lagrange, Alain; Andrean, Herve
PA L'oreal, Fr.
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA French
IC ICM A61K007-13
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

applicant

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000038640	A1	20000706	WO 1999-FR3247	19991222
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2787705	A1	20000630	FR 1998-16376	19981223
	FR 2787705	B1	20020614		
	CA 2321878	AA	20000706	CA 1999-2321878	19991222
	EP 1073407	A1	20010207	EP 1999-961141	19991222
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002533372	T2	20021008	JP 2000-590594	19991222
	US 6458168	B1	20021001	US 2000-622711	20001025
PRAI	FR 1998-16376	A	19981223		
	WO 1999-FR3247	W	19991222		
OS	MARPAT 133:79011				
AB	The invention concerns the use, for dyeing keratinous fibers, of at least an aliphatic cationic amine and a aldehyde or ketone or quinone or di-imino-isoindoline or 3-amino-iso-indolone derivs. for dyeing, by reaction without oxidizing agent, said keratinous fibers. The invention				

also concerns dyeing compns. comprising said compds. and dyeing agents using them. A hair dye **composition** contained 1H-indole-2,3-dione 0.441, [2-(4-aminophenylamino)ethyl]diethyl-methyl-ammonium chloride.HCl 0.99, Et alc. 20, triethanolamine q.s. pH = 7, and water q.s. 100 g. The **composition** is applied on the hair at the rate of 5 g/g of hair, then rinsed, and dried to obtain a copper red color.

ST hair dye aliph cationic amine aldehyde; ketone quinone iminoisoindoline aminoisoindolone hair dye

IT Amines, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (aliphatic, cationic; hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

IT Hair preparations
 (dyes; hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

IT Glycols, uses
 Glycols, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (ethers; hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

IT Ethers, uses
 Ethers, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (glycol; hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

IT Aldehydes, biological studies
 Ketones, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

IT Alcohols, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

IT Glycols, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (hair dye preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

IT **91-56-5**, 1H-Indole-2,3-dione 106-51-4, Quinone, biological studies 3468-11-9 14352-51-3D, derivs. 220224-43-1
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (**hair dye** preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Henkel Kgaa; DE 4314317 A 1994 HCAPLUS
- (2) Henkel Kgaa; DE 4409143 A 1995 HCAPLUS
- (3) L'Oreal; GB 2181750 A 1987 HCAPLUS
- (4) L'Oreal; EP 0502784 A 1992 HCAPLUS
- (5) L'Oreal; EP 0847749 A 1998 HCAPLUS

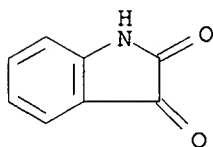
IT **91-56-5**, 1H-Indole-2,3-dione

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**hair dye** preparation containing aliphatic cationic amine, aldehyde, ketone, quinone, or diiminoisoindoline or aminoisoindolone derivs.)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 26 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:456846 HCAPLUS

DN 133:79010

ED Entered STN: 07 Jul 2000

TI Hair dye **composition** containing a cationic derivative, a specific aldehyde, a specific ketone, a quinone and a di-iminoisoindoline or a aminoisoindolone derivative

IN Andrean, Herve; Lagrange, Alain

PA L'Oreal, Fr.

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000038639	A1	20000706	WO 1999-FR3246	19991222
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2787707	A1	20000630	FR 1998-16378	19981223
	FR 2787707	B1	20020920		
	CA 2320925	AA	20000706	CA 1999-2320925	19991222
	EP 1056434	A1	20001206	EP 1999-961140	19991222
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002533371	T2	20021008	JP 2000-590593	19991222
	US 6635090	B1	20031021	US 2000-622710	20001003
PRAI	FR 1998-16378	A	19981223		
	WO 1999-FR3246	W	19991222		
OS	MARPAT 133:79010				
AB	The invention concerns the use for dyeing keratinous fibers of at least a specific cationic derivative, and a compound selected among a specific aldehyde,				
	a specific ketone, a quinone and a di-iminoisoindoline or 3-amino-isoindolone derivative for dyeing, by reaction without oxidizing agent. A hair dyeing composition contained 4-dimethylaminobenzaldehyde 0.447, 3-ethyl-methylbenzothiazolium iodide 0.915, Et alc. 30.0, and water q.s. 100 g. The composition is				

applied on the hair and left for 30 min, then rinsed with water and dried to obtain a lively red color.

- ST hair dye **compn** aldehyde cationic deriv; iminoisoindoline deriv
hair dye **compn** quinone; aminoisoindolone deriv hair dye
compn ketone
- IT Hair preparations
(dyes; hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Glycols, uses
Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(ethers; hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Ethers, uses
Ethers, uses
RL: NUU (Other use, unclassified); USES (Uses)
(glycol; hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Oxidizing agents
Shampoos
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Aldehydes, biological studies
Ketones, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Alcohols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Solvents
(organic; hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT 91-56-5, Isatine 100-10-7, 4-Dimethylaminobenzaldehyde
106-51-4, Quinone, biological studies 130-15-4, 1,4-Naphthoquinone
876-87-9, 1,2-Dimethylquinolinium iodide 3119-93-5 3468-11-9
3468-11-9D, derivs. 5418-63-3, 1,2,3,3-Tetramethyl-3H-indolium iodide
14352-51-3D, derivs.
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT 3176-77-0 33599-35-8 63149-16-6 280105-65-9

RL: NUU (Other use, unclassified); USES (Uses)

(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Henkel; EP 0873745 A 1998 HCAPLUS

(2) L'Oreal; EP 0502783 A 1992 HCAPLUS

(3) L'Oreal; EP 0847749 A 1998 HCAPLUS

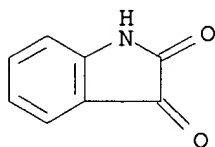
IT 91-56-5, Isatine

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 27 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:456845 HCAPLUS

DN 133:79009

ED Entered STN: 07 Jul 2000

TI Hair dye **composition** containing a specific active methylene compound, a specific aldehyde, a specific ketone, a quinone and a di-imino-isoindoline or 3-amino-isoindolone derivative

IN Andrean, Herve; Lagrange, Alain

PA L'oreal, Fr.

SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000038638	A1	20000706	WO 1999-FR3245	19991222
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2787708	A1	20000630	FR 1998-16379	19981223
	FR 2787708	B1	20020913		
	CA 2320922	AA	20000706	CA 1999-2320922	19991222
	EP 1056433	A1	20001206	EP 1999-961139	19991222
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002533370	T2	20021008	JP 2000-590592	19991222
PRAI	FR 1998-16379	A	19981223		
	WO 1999-FR3245	W	19991222		

OS MARPAT 133:79009

AB The invention concerns the use for dyeing keratinous fibers of at least a specific active methylene compound and a compound selected among a specific aldehyde, a specific ketone, a quinone and a di-iminoisoindoline or 3-amino-isoindolone derivative for dyeing, by reaction without oxidizing agent. A hair dyeing **composition** contained 4-dimethylaminobenzaldehyde 0.447, benzofuran-(2H)-one 0.402, Et alc. 30.0, and water q.s. 100 g. The **composition** is applied on the hair and left for 30 min, then rinsed with water and dried to obtain a lively orange color.

ST hair dye **compn** aldehyde ketone quinone; iminoisoindoline deriv
hair dye **compn**; aminoisoindolone deriv hair dye **compn**

IT Hair preparations

(dyes; hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT Glycols, uses

Glycols, uses

RL: NUU (Other use, unclassified); USES (Uses)

(ethers; hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT Ethers, uses

Ethers, uses

RL: NUU (Other use, unclassified); USES (Uses)

(glycol; hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT Oxidizing agents

Shampoos

(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT Aldehydes, biological studies

Ketones, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT Alcohols, uses

RL: NUU (Other use, unclassified); USES (Uses)

(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT Glycols, uses

RL: NUU (Other use, unclassified); USES (Uses)

(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT Solvents

(organic; hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT 91-56-5, Isatine 100-10-7, 4-Dimethylaminobenzaldehyde
106-51-4, Quinone, biological studies 130-15-4, 1,4-Naphthoquinone
553-86-6, 2(3H)-Benzofuranone 614-16-4, Benzoylacetonitrile 2465-56-7D
, Methylene, compds. 2688-49-5 3468-11-9D, derivs. 53175-37-4,

1H-Isoindole-1,3-diamine 93679-99-3D, derivs.

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**hair dye composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

IT 53666-79-8

RL: NUU (Other use, unclassified); USES (Uses)

(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Henkel; DE 4314317 A 1994 HCAPLUS

(2) Henkel; EP 0873745 A 1998 HCAPLUS

(3) L'Oreal; EP 0847749 A 1998 HCAPLUS

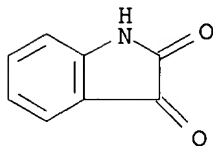
IT 91-56-5, Isatine

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**hair dye composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 28 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:314394 HCAPLUS

DN 132:325815

ED Entered STN: 15 May 2000

TI Oxidative hair dye **compositions** containing 1-(2,5-diaminophenyl)ethylene glycol as developer

IN Lim, Mu-ill; Stasaitis, Linas R.; Pan, Yuh-guo; Wong, Michael Y. M.

PA Bristol-Myers Squibb Company, USA; Clairol Incorporated

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C07C215-68

ICS A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 25

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 999203	A1	20000510	EP 1999-203596	19991101
	EP 999203	B1	20030226		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	US 6228130	B1	20010508	US 1998-185019	19981103

MX 9909955 A 20000930 MX 1999-9955 19991028
 JP 2000143592 A2 20000523 JP 1999-311839 19991102
 PRAI US 1998-185019 A 19981103

AB 5-Nitroisatin is converted to the α -keto acid sodium salt that is reduced with a BH₃-THF complex and then hydrogenated to give 1-(2,5-diaminophenyl)ethylene glycol, a novel compound useful as a primary intermediate in the production of oxidative hair dyes.

ST oxidative hair dye diaminophenylethylene glycol prepn; ethylene glycol diaminophenyl hair dye prepn

IT Hair preparations
 (dyes, oxidative; oxidative hair dye compns. containing (diaminophenyl)ethylene glycol as developer)

IT 90-15-3, 1-Naphthol 95-55-6, 2-Aminophenol 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 123-30-8, 4-Aminophenol 591-27-5, 3-Aminophenol 608-25-3, 2-Methylresorcinol 2835-95-2, 2-Methyl-5-aminophenol 2835-96-3, 2-Methyl-p-aminophenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 3-Methyl-p-aminophenol 7469-77-4, 2-Methyl-1-naphthol 7575-35-1, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 16867-03-1, 2-Amino-3-hydroxypyridine 55302-96-0 70643-19-5, 2,4-Diaminophenoxyethanol 94082-77-6 126596-25-6
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oxidative hair dye compns. containing (diaminophenyl)ethylene glycol as developer)

IT 220264-58-4P
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (oxidative hair dye compns. containing (diaminophenyl)ethylene glycol as developer)

IT **611-09-6**, 5-Nitroisatin 1310-58-3, Potassium hydroxide (K(OH)), reactions 1310-65-2, Lithium hydroxide (Li(OH)) 1310-73-2, Sodium hydroxide (Na(OH)), reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative **hair dye** compns. containing (diaminophenyl)ethylene glycol as developer)

IT 267228-46-6P 267228-47-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (oxidative hair dye compns. containing (diaminophenyl)ethylene glycol as developer)

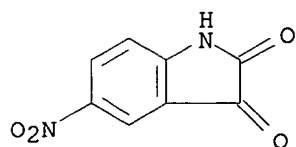
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
 (1) Marie-Pascale, A; US 5538516 A 1996 HCAPLUS
 (2) Wella Ag; WO 9014818 A 1990 HCAPLUS

IT **611-09-6**, 5-Nitroisatin
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative **hair dye** compns. containing (diaminophenyl)ethylene glycol as developer)

RN 611-09-6 HCAPLUS

CN 1H-Indole-2,3-dione, 5-nitro- (9CI) (CA INDEX NAME)



L48 ANSWER 29 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:718747 HCAPLUS

DN 131:327320

ED Entered STN: 11 Nov 1999

TI Substituted p-aminophenol, process of preparation and use in dyeing hair

IN Lim, Mu-Ill; Stasaitis, Linas R.; Pan, Yuh-Guo; Wong, Michael Y. M.

PA Bristol-Myers Squibb Company, USA

SO U.S., 14 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-13

ICS C07C215-76; C07C209-36

NCL 008408000

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 25

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5980584	A	19991109	US 1998-185023	19981103
	EP 1006104	A1	20000607	EP 1999-203597	19991101
	EP 1006104	B1	20020925		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRAI US 1998-185023 A 19981103

AB The novel primary intermediate, 1-(5-amino-2-hydroxyphenyl)ethane-1,2-diol (I) and a method for producing same, are disclosed. The novel intermediate can be employed as a replacement for p-aminophenol in oxidation dye formulations. I was prepared by hydrogenation of 1-(5-nitro-2-hydroxyphenyl)ethane-1,2-diol (preparation given) over Pd/C. An oxidative hair dye **composition** contained cocamidopropyl betaine 17, ethanolamine 2, oleic acid 0.75, citric acid 0.1, ammonium hydroxide 5, behentrimonium chloride 0.5, sodium sulfite 0.1, EDTA 0.1 Erythorbic acid 0.4, I 0.7, N,N-bis(2-hydroxyethyl)-p-phenylenediamine 0.05, p-phenylenediamine 0.05, 1-(2,5-diaminophenyl)ethylene glycol 0.05, resorcinol 0.5 0., 4-amino-2-hydroxytoluene 0.3, 2-Methyl-5-hydroxyethylaminophenol 0.03, m-aminophenol 0.3, 1-naphthol 0.05, water q.s. 100. The color obtained on gray hair was auburn.

ST aminophenol deriv oxidative dye hair

IT Hair preparations

(dyes, oxidative; substituted p-aminophenol, process of preparation and use in dyeing hair)

IT Coupling agents

Oxidizing agents

(substituted p-aminophenol, process of preparation and use in dyeing hair)

IT Alkali metal hydroxides

RL: RCT (Reactant); RACT (Reactant or reagent)

(substituted p-aminophenol, process of preparation and use in dyeing hair)

IT 90-15-3, 1-Naphthalenol 95-55-6 106-50-3, 1,4-Benzenediamine,

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

biological studies 108-46-3, 1,3-Benzenediol, biological studies
591-27-5 608-25-3 2835-95-2 2835-99-6, 3-Methyl-4-aminophenol
3131-52-0, 1H-Indole-5,6-diol 7469-77-4 7575-35-1 16867-03-1
70643-19-5 220264-58-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(substituted p-aminophenol, process of preparation and use in dyeing hair)

IT 220264-60-8P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation); USES (Uses)

(substituted p-aminophenol, process of preparation and use in dyeing hair)

IT **611-09-6**, 5-Nitroisatin 1310-58-3, Potassium hydroxide,
reactions 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide,
reactions 14044-65-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(substituted p-aminophenol, process of preparation and use in **dyeing
hair**)

IT 249286-16-6P 249286-17-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(substituted p-aminophenol, process of preparation and use in dyeing hair)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; EP 182187 1986 HCAPLUS
- (2) Anon; DE 3543345 1987 HCAPLUS
- (3) Anon; WO 9427564 1994 HCAPLUS
- (4) Anon; WO 9628405 1996 HCAPLUS
- (5) Anon; DE 3441148 1998 HCAPLUS
- (6) Audousset; US 5752983 1998 HCAPLUS
- (7) Audousset; US 5814106 1998 HCAPLUS
- (8) Chan; US 5344463 1994 HCAPLUS
- (9) Clausen; US 4997451 1991 HCAPLUS
- (10) Junino; US 5364413 1994 HCAPLUS
- (11) Lagrange; US 5703266 1997 HCAPLUS
- (12) Mano; US 5047066 1991 HCAPLUS

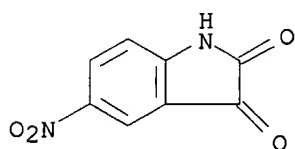
IT **611-09-6**, 5-Nitroisatin

RL: RCT (Reactant); RACT (Reactant or reagent)

(substituted p-aminophenol, process of preparation and use in **dyeing
hair**)

RN 611-09-6 HCAPLUS

CN 1H-Indole-2,3-dione, 5-nitro- (9CI) (CA INDEX NAME)



L48 ANSWER 30 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:668078 HCAPLUS

DN 129:293673

ED Entered STN: 22 Oct 1998

TI Hair dye

IN Hoeffkes, Horst; Buettner, Roswitha

PA Henkel K.-G.a.A., Germany

SO Eur. Pat. Appl., 6 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 868902	A2	19981007	EP 1998-105194	19980323
	EP 868902	A3	20001108		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

DE 19713510 A1 19981008 DE 1997-19713510 19970401

PRAI DE 1997-19713510 A 19970401

AB A hair dye **composition** comprises 0.1-15 weight% fat-soluble or water-labile direct dyes in an oily carrier containing 2-70 weight% nonionic emulsifiers, 3-50

weight% thickeners, and 0-50 weight% water-soluble polyols. This **composition** is suitable for isatin derivative dyes or carbonyl compound vinyllog dyes, especially

as a component of 2-component dye systems where the other component is an aqueous preparation of water-soluble dyes or dye precursors, e.g. aromatic or heterocyclic amines or phenols or their salts; the components are packed sep. and mixed immediately prior to use. A 3rd component comprising an oxidizing agent, also packed sep., may be included. Thus, an oily carrier was prepared containing Cetirol 868 20.0, paraffin oil 60.0, glycerin monostearate 10.0, and Dehydrol LS4 10.0 parts; this carrier 98.12 was combined with allylisatin 1.88 parts. An aqueous carrier contained Texapon N28 40.0, Dehyton K 25.0, C12-18 coco fatty alcs. 4.0, hydrogenated tallow fatty alcs. 17.0, Eumulgin B2 1.5, and H2O 12.5 parts; this carrier 50 was combined with 2,4,5,6-tetraaminopyrimidine sulfate 5.2 and H2O 44.8 parts. The oily dye-carrier mixture and the aqueous pyrimidine-carrier mixture were mixed

1:1 and applied to blond hair for 30 min at 32° to produce an intense auburn color.

ST lipid soluble direct hair dye; isatin direct hair dye

IT Hair preparations

(dyes, direct, lipid-soluble; hair dye)

IT Fatty acids, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(esters, with polyols; hair dye)

IT Thickening agents

(hair dye)

IT Diglycerides

Lipids, biological studies

Monoglycerides

Polyoxyalkylenes, biological studies

Soaps

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye)

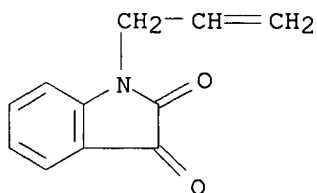
IT Emulsifying agents

(nonionic; hair dye)

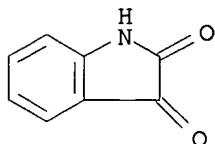
IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(polyhydric, esters, with fatty acids; hair dye)
 IT Carbonyl compounds (organic), biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (vinyls; hair dye)
 IT **830-74-0**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (dye; hair dye)
 IT **91-56-5D**, Isatin, derivs.
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (dyes; hair dye)
 IT 25322-68-3, PEG
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (hair dye)
 IT **830-74-0**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (dye; hair dye)
 RN 830-74-0 HCAPLUS
 CN 1H-Indole-2,3-dione, 1-(2-propenyl)- (9CI) (CA INDEX NAME)



IT **91-56-5D**, Isatin, derivs.
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (dyes; hair dye)
 RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 31 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1997:740966 HCAPLUS
 DN 128:39385
 ED Entered STN: 26 Nov 1997
 TI Direct hair dye
 IN Kunz, Manuela; Le Cruer, Dominique; Balzer, Wolfgang R.
 PA Wella Ag, Germany
 SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM D06P001-651

ICS D06P001-39; D06P001-41; D06P003-04; A61K007-13

ICA D06P003-60; D06P003-14; D06P003-24; D06P003-40; C09B029-00; C09B031-00; C09B033-00; C09B035-00; C09B001-00; C09B003-00; C09B005-00; C09B051-00; C09B057-00; C07C069-675; C07C069-708

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19618595	A1	19971113	DE 1996-19618595	19960509
	EP 806198	A2	19971112	EP 1997-104473	19970315
	EP 806198	A3	20010725		
	R: DE, ES, FR, GB, IT				
	JP 10053970	A2	19980224	JP 1997-132939	19970506
	BR 9703093	A	19980908	BR 1997-3093	19970508
PRAI	DE 1996-19618595	A	19960509		
OS	MARPAT 128:39385				

AB Dye compns. for hair or other natural or synthetic fibers contain ≥ 1 acidic and/or basic direct dye and a hydroxylated carrier mol. which is uncharged at pH 7.0 and has an octanol-water partition coefficient of 0.3-3.0. Suitable carrier mols. include various phenols and α -hydroxy acid esters. These compns. provide intense, uniform coloration of the hair with little or no staining of the skin and are toxicol. safe. Thus, a reddish hair dye **composition** contained 40% aqueous Na coco amphotoacetate 2.1, glycolic acid 1.3, I-PrOH 5.0, 1,2-propanediol 2.0, di-Na EDTA 0.3, vanillin 4.0, Acid Red 14 1.5, and demineralized water 83.8 g.

ST direct hair dye hydroxy carrier

IT Carriers

Dyes

(direct hair dye)

IT Hydroxy compounds

Phenols, biological studies

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified);

BIOL (Biological study); USES (Uses)

(direct hair dye)

IT Hair preparations

(dyes; direct hair dye)

IT 90-02-8, Salicylaldehyde, biological studies 98-17-9, 3-Trifluoromethylphenol 99-76-3, Methyl p-hydroxybenzoate 102-29-4, Resorcinol monoacetate 108-39-4, biological studies 121-32-4, Ethylvanillin 121-33-5, Vanillin 122-99-6, 2-Phenoxyethanol 123-08-0, p-Hydroxybenzaldehyde 129-17-9, Acid Blue 1 138-22-7, Butyl lactate 139-85-5, 3,4-Dihydroxybenzaldehyde 150-19-6, Resorcinol monomethyl ether 150-76-5, p-Hydroxyanisole 367-12-4, o-Fluorophenol 371-41-5, p-Fluorophenol 372-20-3, m-Fluorophenol 518-47-8, Acid Yellow 73 533-31-3, 3,4-Methylenedioxyphenol 547-57-9, Acid Orange 6 621-59-0, 3-Hydroxy-4-methoxybenzaldehyde 632-99-5, Basic Violet 14 633-96-5, Acid Orange 7 846-70-8, Acid Yellow 1 **860-22-0**, Acid Blue 74 915-67-3, Acid Red 27 1064-48-8, Acid Black 1 1320-07-6, Acid Orange 24 1934-21-0, Acid Yellow 23 2033-89-8, 3,4-Dimethoxyphenol 2390-60-5, Basic Blue 7 2519-30-4, C.I. 28440 2611-82-7, Acid Red 18 2650-18-2, Acid Blue 9 3087-16-9, C.I. 44090 3520-42-1 3536-49-0, Acid Blue 3 3567-66-6, Acid Red 33 3567-69-9,

Acid Red 14 4368-56-3, Acid Blue 62 4403-90-1, Acid Green 25
 4430-18-6, Acid Violet 43 4792-78-3 5402-55-1, 2-Thiopheneethanol
 5413-75-2, Acid Red 73 5610-64-0, Acid Black 52 6252-76-2, Acid Violet
 9 6373-74-6, Acid Orange 3 6373-79-1, Acid Brown 13 6441-93-6, C.I.
 18065 7397-62-8, Butyl glycolate 8004-92-0, Acid Yellow 3
 12220-24-5, Acid Red 195 16423-68-0, Acid Red 51 17194-82-0,
 4-Hydroxyphenylacetamide 17372-87-1, Acid Red 87 18472-87-2, Acid Red
 92 26153-38-8, 3,5-Dihydroxybenzaldehyde 26381-41-9, Basic Brown 16
 33239-19-9, Acid Red 95 68123-13-7, Basic Blue 99 68391-30-0, Basic
 Red 76 176742-32-8, Basic Brown 17
 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified);
 BIOL (Biological study); USES (Uses)

(direct **hair dye**)

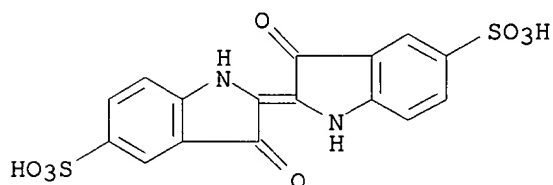
IT 860-22-0, Acid Blue 74

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified);
 BIOL (Biological study); USES (Uses)

(direct **hair dye**)

RN 860-22-0 HCAPLUS

CN 1H-Indole-5-sulfonic acid, 2-(1,3-dihydro-3-oxo-5-sulfo-2H-indol-2-
 ylidene)-2,3-dihydro-3-oxo-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

L48 ANSWER 32 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:470067 HCAPLUS

DN 127:99528

ED Entered STN: 26 Jul 1997

TI An enzyme for dyeing keratinous fibers

IN Aaslyng, Dorrit; Sorensen, Niels Henrik; Rorbaek, Karen

PA Novo Nordisk A/s, Den.; Aaslyng, Dorrit; Sorensen, Niels Henrik; Rorbaek, Karen

SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C09B067-00

ICS A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9719998	A1	19970605	WO 1996-DK498	19961129
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
 MR, NE, SN, TD, TG

AU 9676912 A1 19970619 AU 1996-76912 19961129

EP 863950 A1 19980916 EP 1996-939816 19961129

EP 863950 B1 20011010

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI

JP 2000503042 T2 20000314 JP 1997-520085 19961129

AT 206734 E 20011015 AT 1996-939816 19961129

ES 2166009 T3 20020401 ES 1996-939816 19961129

PRAI DK 1995-1356 A 19951130

WO 1996-DK498 W 19961129

AB The present invention relates to a dyeing **composition**, a method for
 dyeing keratinous fibers, in particular hair, fur, hide and wool, and the
 use of a *Scytalidium thermophilum* laccase for dyeing.

ST hair dye laccase enzyme *Scytalidium*

IT Hair preparations

(dyes; enzyme for dyeing keratinous fibers such as hair)

IT Fur

Hair

Hide

Protein sequences

Scytalidium

Scytalidium thermophilum

Wool

cDNA sequences

(enzyme for dyeing keratinous fibers such as hair)

IT 173402-34-1P

RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU
 (Biological study, unclassified); BUU (Biological use, unclassified); PRP
 (Properties); BIOL (Biological study); OCCU (Occurrence); PREP
 (Preparation); USES (Uses)

(amino acid sequence; enzyme for dyeing keratinous fibers such as hair)

IT 83-56-7, 1,5-Dihydroxynaphthalene 87-66-1, 1,2,3-Benzenetriol 90-15-3,
 α -Naphthol 95-88-5, 4-Chlororesorcinol 108-45-2,
 1,3-Benzenediamine, biological studies 108-46-3, Resorcinol, biological
 studies 120-80-9, 1,2-Dihydroxybenzene, biological studies 123-31-9,
 1,4-Benzenediol, biological studies 533-73-3, 1,2,4-Trihydroxybenzene
 608-25-3, 1,3-Dihydroxy-2-methylbenzene 615-05-4, 2,4-Diaminoanisole
 1124-09-0, 1,2,4-Trihydroxy-5-methylbenzene

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(die modifier; enzyme for dyeing keratinous fibers such as hair)

IT 50-78-2, Aspirin **91-56-5D**, Isatin, derivs. 92-82-0D,
 Phenazine, derivs. 94-09-7, p-Aminobenzoic acid ethylester 94-14-4
 95-55-6, 1-Hydroxy-2-aminobenzene 95-70-5 95-80-7, 2,4-Diaminotoluene
 101-54-2, 4-Aminodiphenylamine 106-50-3, 1,4-Benzenediamine, biological
 studies 123-30-8, 4-Aminophenol 136-44-7 141-86-6,
 2,6-Diaminopyridine 150-13-0D, p-Aminobenzoic acid, derivs. 150-75-4
 496-72-0, 4-Methyl-o-phenylenediamine 591-27-5 603-81-6,
 2,3-Diaminobenzoic acid 615-66-7 823-40-5 2835-95-2 5307-02-8,
 2-Methoxy-p-phenylenediamine 14779-78-3, p-Dimethylaminobenzoic acid
 amyl ester 18450-16-3, 2-Phenazinecarboxylic acid 30267-15-3
 52584-95-9, 2,7-Phenazinedicarboxylic acid 66566-48-1 70643-19-5
 74830-28-7 78132-97-5 85482-35-5 102988-49-8 102988-50-1

102988-51-2 102988-52-3 103021-30-3 120209-97-4,
 2,7-Diaminophenazine 125239-64-7, 2,7-Diamino-3,8-dimethoxyphenazine
 125239-65-8, 2,7-Diamino-3-methoxyphenazine 132781-92-1 191849-69-1
 191849-70-4 191849-71-5 191849-72-6, 1,8-Phenazinedicarboxylic acid
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(**dye** precursor; enzyme for **dyeing** keratinous fibers
 such as **hair**)

IT 7704-40-7, 2,8-Diaminophenazine 80498-15-3, Laccase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(enzyme for dyeing keratinous fibers such as hair)

IT 192141-40-5P
 RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU
 (Biological study, unclassified); PRP (Properties); BIOL (Biological
 study); OCCU (Occurrence); PREP (Preparation)

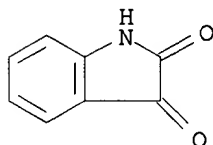
(nucleotide sequence; enzyme for dyeing keratinous fibers such as hair)

IT **91-56-5D**, Isatin, derivs.
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(**dye** precursor; enzyme for **dyeing** keratinous fibers
 such as **hair**)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI). (CA INDEX NAME)



L48 ANSWER 33 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1995:713982 HCAPLUS
 DN 123:92879
 ED Entered STN: 02 Aug 1995
 TI Process for direct hair dyeing using natural dyes and steam
 IN Audousset, Marie-Pascale; Sturla, Jean-Michel
 PA Oreal S. A., Fr.
 SO Eur. Pat. Appl., 7 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 659397	A1	19950628	EP 1994-402569	19941114
	EP 659397	B1	19990414		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	FR 2713925	A1	19950623	FR 1993-15482	19931222
	FR 2713925	B1	19960119		
	AT 178785	E	19990415	AT 1994-402569	19941114
	ES 2132357	T3	19990816	ES 1994-402569	19941114
	CA 2137992	AA	19950623	CA 1994-2137992	19941213

BR 9405069	A	19951017	BR 1994-5069	19941220
JP 08026951	A2	19960130	JP 1994-318877	19941221
JP 2554034	B2	19961113		
HU 70588	A2	19951030	HU 1994-3749	19941222
US 5725603	A	19980310	US 1996-619137	19960320

PRAI FR 1993-15482 A 19931222
US 1994-357751 B1 19941216

AB A process for direct dyeing of hair comprises application of a **composition** containing a natural dye to the hair and exposing it to steam at a temperature of $\geq 75^\circ$ for a period of ≤ 2 min. The hair is dyed uniformly in a short period of time without skin or scalp being stained. A hair dye **composition** contained Lawsone 0.15, Arlasolve DMI 4.85, excipient 10, and water 5g. The dye is applied on the hair, then the hair is exposed to a jet of steam at 90° for 45 s.

ST hair prepn natural dye steam
IT Air
Steam
(process for direct hair dyeing using natural dyes and steam)

IT Hair preparations
(dyes, process for direct hair dyeing using natural dyes and steam)

IT Quinones
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hydroxy, process for direct hair dyeing using natural dyes and steam)

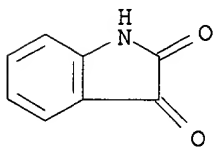
IT Dyes
(natural, process for direct hair dyeing using natural dyes and steam)

IT Flavonoids
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxo hydroxy, process for direct hair dyeing using natural dyes and steam)

IT 83-72-7, Lawsone 85-23-4 **91-56-5**, Isatin 474-07-7, Brasilin 474-07-7D, Brasilin, hydroxy derivs. **482-89-3D**, Indigo, derivs. 483-55-6, 2-Hydroxy-3-methyl-1,4-naphthoquinone 4923-55-1, 2,5-Dihydroxy-1,4-naphthoquinone 38185-48-7, Santalin a 51033-46-6, Santalin b
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(process for direct **hair dyeing** using natural **dyes** and steam)

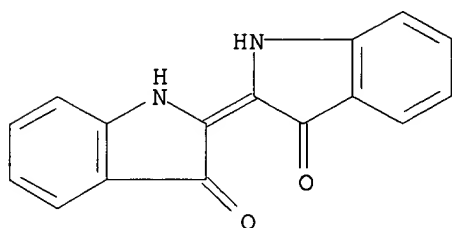
IT **91-56-5**, Isatin **482-89-3D**, Indigo, derivs.
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(process for direct **hair dyeing** using natural **dyes** and steam)

RN 91-56-5 HCAPLUS
CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



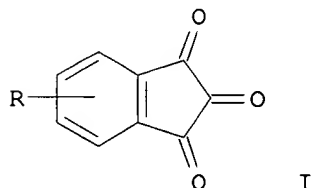
RN 482-89-3 HCAPLUS
CN 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-

(9CI) (CA INDEX NAME)



L48 ANSWER 34 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1995:312486 HCAPLUS
 DN 122:89076
 ED Entered STN: 25 Jan 1995
 TI Ninhydrin-containing **compositions** as hair dyes
 IN Moeller, Hinrich; Hoeffkes, Horst
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 9 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM D06P003-04
 ICS A61K007-13
 ICA C09B053-00; D06P003-14; D06P003-30; D06P003-60; D06P003-40; D06P003-24;
 D06P003-70; D06P003-52; B01F017-00; D06P001-653; D06P001-673
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4317855	A1	19941201	DE 1993-4317855	19930528
PRAI	DE 1993-4317855		19930528		
OS	MARPAT 122:89076				
GI					



AB Ninhydrin and its derivs. I (R = H, halo, C1-4 alkyl, C1-4 alkoxy, SO₃H, NO₂, CO₂H), combined with a primary or secondary amine, heterocyclic compound, or OH-substituted aromatic compound in an aqueous medium, are useful
 as dyes for keratin fibers such as wool, furs, and human hair. Thus, a suspension of ninhydrin 10, L-phenylalanine 10, NaOAc 10, and CaCl₂ 10 mmol in 100 mL water was heated to boiling, cooled, and filtered, and the pH of the solution was adjusted to 6. Gray hair was colored brownish-violet by this solution

ST ninhydrin amine hair dye
 IT Amines, biological studies
 Amino acids, biological studies
 Heterocyclic compounds
 Peptides, biological studies
 Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (reaction products with ninhydrin derivs.; ninhydrin-containing compns. as hair dyes)

IT Hair preparations
 (dyes, ninhydrin-containing compns. as hair dyes)

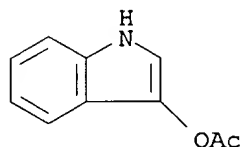
IT 56-87-1D, Lysine, reaction products with ninhydrin derivs. 59-92-7D, DOPA, reaction products with ninhydrin derivs. 60-18-4D, Tyrosine, reaction products with ninhydrin derivs. 63-91-2D, Phenylalanine, reaction products with ninhydrin derivs. 70-26-8D, Ornithine, reaction products with ninhydrin derivs. 71-00-1D, Histidine, reaction products with ninhydrin derivs. 73-22-3D, Tryptophan, reaction products with ninhydrin derivs. 74-79-3D, Arginine, reaction products with ninhydrin derivs. 91-95-2D, 3,3'-Diaminobenzidine, reaction products with ninhydrin 95-70-5D, 2,5-Diaminotoluene, reaction products with ninhydrin 99-98-9D, N,N-Dimethyl-p-phenylenediamine, reaction products with ninhydrin 106-50-3D, p-Phenylenediamine, reaction products with ninhydrin 118-70-7D, 4,5,6-Triaminopyrimidine, reaction products with ninhydrin 123-30-8D, 4-Aminophenol, reaction products with ninhydrin 141-43-5D, Ethanolamine, reaction products with ninhydrin 485-47-2D, Ninhydrin, derivs., reaction products with amines and heterocyclic compds. and hydroxy aromatic compds. 488-43-7D, Glucamine, reaction products with ninhydrin 496-15-1D, Indoline, reaction products with ninhydrin 608-08-2D, Indoxyl acetate, reaction products with ninhydrin 617-89-0D, Furfurylamine, reaction products with ninhydrin 621-96-5D, 4,4'-Diaminostilbene, reaction products with ninhydrin 1004-74-6D, 2,4,5,6-Tetraaminopyrimidine, reaction products with ninhydrin 1004-75-7D, 4-Hydroxy-2,5,6-triaminopyrimidine, reaction products with ninhydrin 1455-77-2D, 3,5-Diamino-1,2,4-triazole, reaction products with ninhydrin 2835-96-3D, 2-Methyl-4-aminophenol, reaction products with ninhydrin 2835-99-6D, 3-Methyl-4-aminophenol, reaction products with ninhydrin 3204-61-3D, 1,2,4,5-Tetraaminobenzene, reaction products with ninhydrin 5307-02-8D, 2-Methoxy-p-phenylenediamine, reaction products with ninhydrin 6393-01-7D, 2,5-Dimethyl-1,4-phenylenediamine, reaction products with ninhydrin 26878-35-3D, 2,5-Diaminopyridine dihydrochloride, reaction products with ninhydrin 79352-72-0D, reaction products with ninhydrin 84540-47-6D, 2,6-Dihydroxy-3,4-dimethylpyridine, reaction products with ninhydrin 93841-24-8D, reaction products with ninhydrin 160430-99-9D, reaction products with ninhydrin
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (ninhydrin-containing compns. as hair dyes)

IT 106507-42-0, 5-Methoxyninhydrin
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (reaction products with amines and heterocyclic compds. and hydroxy aromatic compds.; ninhydrin-containing compns. as hair dyes)

IT 608-08-2D, Indoxyl acetate, reaction products with ninhydrin
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (ninhydrin-containing compns. as hair dyes)

RN 608-08-2 HCAPLUS

CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)



L48 ANSWER 35 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1995:261204 HCAPLUS
 DN 122:38536
 ED Entered STN: 24 Dec 1994
 TI Oxidative hair dye **compositions** and processes utilizing leuco
 vat dyes
 IN Lewis, David M.
 PA Clairol Inc, USA
 SO U.S., 6 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A61K007-13
 ICS C09B009-00
 NCL 008406000
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5364415	A	19941115	US 1993-67894	19930527
PRAI	US 1993-67894		19930527		
AB	Leuco vat dyes are employed to produce brighter shades from oxidative dyes in oxidative hair coloring systems and processes.				
ST	leuco vat dye oxidative hair color				
IT	Hair preparations (dyes, oxidative, oxidative hair dye compns. based on leuco vat dyes)				
IT	10134-35-7 , Indigosol Grey IBL RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CI Solubilized Vat Black 1; oxidative hair dye compns. based on leuco vat dyes)				
IT	23725-15-7, Indigosol Brown IBR RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CI Solubilized Vat Brown 1; oxidative hair dye compns. based on leuco vat dyes)				
IT	4425-36-9 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CI Solubilized Vat Brown 5; oxidative hair dye compns. based on leuco vat dyes)				
IT	1324-72-7, Indigosol Green IGG RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CI Solubilized Vat Green 2; oxidative hair dye compns. based on leuco vat dyes)				
IT	3875-72-7 , Indigosol Pink IR				

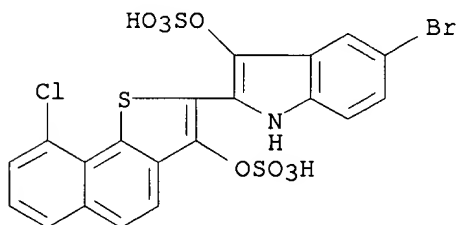
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(CI Solubilized Vat Red 1; oxidative **hair dye**
compns. based on leuco vat **dyes**)

IT **10241-20-0**, Indigosol Violet ARR
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(CI Solubilized Vat Violet 8; oxidative **hair dye**
compns. based on leuco vat **dyes**)

IT 3564-70-3, Indigosol Golden Yellow IGK
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(CI Solubilized Vat Yellow 4; oxidative hair dye compns. based on leuco
vat dyes)

IT **10134-35-7**, Indigosol Grey IBL
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(CI Solubilized Vat Black 1; oxidative **hair dye**
compns. based on leuco vat **dyes**)

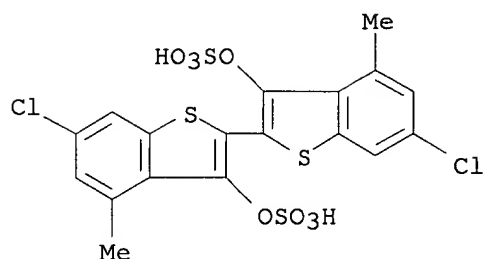
RN 10134-35-7 HCAPLUS
CN 1H-Indol-3-ol, 5-bromo-2-[9-chloro-3-(sulfooxy)naphtho[1,2-b]thien-2-yl]-,
hydrogen sulfate (ester), disodium salt (9CI) (CA INDEX NAME)



●2 Na

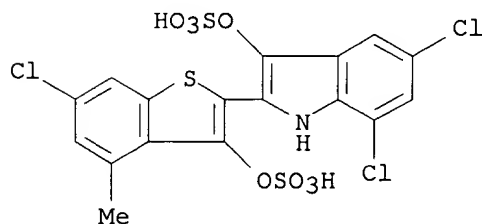
IT **3875-72-7**, Indigosol Pink IR
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(CI Solubilized Vat Red 1; oxidative **hair dye**
compns. based on leuco vat **dyes**)

RN 3875-72-7 HCAPLUS
CN [2,2'-Bibenzo[b]thiophene]-3,3'-diol, 6,6'-dichloro-4,4'-dimethyl-,
bis(hydrogen sulfate), disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

IT 10241-20-0, Indigosol Violet ARR
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (CI Solubilized Vat Violet 8; oxidative **hair dye**
 compns. based on leuco vat **dyes**)
 RN 10241-20-0 HCAPLUS
 CN 1H-Indol-3-ol, 5,7-dichloro-2-[6-chloro-4-methyl-3-(sulfooxy)benzo[b]thien-
 2-yl]-, hydrogen sulfate (ester), disodium salt (9CI) (CA INDEX NAME)



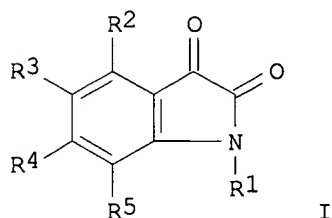
●2 Na

L48 ANSWER 36 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1995:248743 HCAPLUS
 DN 122:38518
 ED Entered STN: 17 Dec 1994
 TI Isatin-containing **compositions** as hair dyes
 IN Moeller, Hinrich; Hoeffkes, Horst
 PA Henkel KGaA, Germany
 SO Ger. Offen., 13 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A61K007-13
 ICS D06P003-04; D06P001-642; D06P001-651; D06P001-62; D06P001-673;
 A61K007-06
 ICA C09B007-00; C09B055-00; D06P003-16; D06P003-30; D06P003-62; D06P003-40;
 D06P003-24; D06P003-52; D06P003-70
 CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4314317	A1	19941103	DE 1993-4314317	19930430
	WO 9424988	A1	19941110	WO 1994-EP1246	19940421
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 695162	A1	19960207	EP 1994-915084	19940421
	EP 695162	B1	19970618		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
	JP 08509478	T2	19961008	JP 1994-523838	19940421
	AT 154509	E	19970715	AT 1994-915084	19940421
	ES 2105707	T3	19971016	ES 1994-915084	19940421
	US 5616150	A	19970401	US 1995-535261	19951030
PRAI	DE 1993-4314317		19930430		
	WO 1994-EP1246		19940421		
OS	MARPAT 122:38518				
GI					



AB Isatin derivs. I [R1 = H, C1-4 alkyl, C2-4 hydroxyalkyl, C2-20 acyl,, Bz, Ph; R2-R5 = H, C1-4 alkyl, C1-4 alkoxy, OH, halo, NO2, SO3H, CO2H, (substituted) amino] combined with amines, aniline derivs., or heterocyclic or isocyclic compds. without primary NH2 groups are useful as direct dyes for hair and other natural and synthetic fibers. The color intensity is enhanced by addition of metal or ammonium salts. Thus, a paste of isatin 10, ethanolamine 1, and NaOAc 10 mmol in 100 mL H2O was heated to boiling, cooled, filtered, adjusted to pH 6 with HCl, and used to impart a coppery color to gray hair.

ST isatin deriv amine hair dye

IT Amines, biological studies
Heterocyclic compounds
Quaternary ammonium compounds, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(isatin-amine combinations as hair dyes)

IT Carbohydrates and Sugars, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(aminodeoxy, isatin-amine combinations as hair dyes)

IT Sulfonic acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(arene, amino; isatin-amine combinations as hair dyes)

IT Amino acids, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (aryl, isatin-amine combinations as hair dyes)

IT Hair preparations
 (dyes, direct, isatin-amine combinations as hair dyes)

IT 62-53-3D, Aniline, derivs. 65-49-6, 4-Aminosalicylic acid 72-17-3, Sodium lactate 77-86-1 78-90-0, 1,2-Diaminopropane 87-51-4, 1H-Indole-3-acetic acid, biological studies 88-21-1, 2-Aminobenzenesulfonic acid 89-57-6, 5-Aminosalicylic acid 91-21-4 **91-56-5**, Isatin **91-56-5D**, Isatin, derivs. 91-95-2, 3,3',4,4'-Tetraaminodiphenyl 96-54-8, 1-Methylpyrrole 99-05-8, 3-Aminobenzoic acid 99-31-0, 5-Aminoisophthalic acid 101-77-9, 4,4'-Diaminodiphenylmethane 103-76-4, 1-(2-Hydroxyethyl)piperazine 103-82-2, 2-Phenylacetic acid, biological studies 107-15-3, 1,2-Ethanediamine, biological studies 109-76-2, 1,3-Diaminopropane 109-96-6, 3-Pyrroline 109-97-7, Pyrrole 110-00-9, Furan 110-02-1, Thiophene 110-76-9, 2-Ethoxyethylamine 110-85-0, Piperazine, biological studies 110-89-4, Piperidine, biological studies 111-40-0 111-41-1, 2-(2-Aminoethylamino)ethanol 115-69-5, 2-Amino-2-methylpropane-1,3-diol 116-63-2, 4-Amino-3-hydroxynaphthalene-1-sulfonic acid 118-92-3, 2-Aminobenzoic acid 119-59-5, 4,4'-Diaminodiphenyl sulfoxide 120-72-9, Indole, biological studies 121-47-1, 3-Aminobenzenesulfonic acid 121-57-3, 4-Aminobenzenesulfonic acid 123-75-1, Pyrrolidine, biological studies 124-68-5, 2-Amino-2-methylpropanol 127-08-2, Potassium acetate 127-09-3, Sodium acetate 139-65-1, 4,4'-Diaminodiphenyl sulfide 140-31-8, 1-(2-Aminoethyl)piperazine 141-43-5, biological studies 150-13-0, 4-Aminobenzoic acid 156-87-6, 3-Aminopropanol 288-13-1, Pyrazole 288-32-4, Imidazole, biological studies 299-28-5, Calcium gluconate 444-27-9, Thiazolidine-4-carboxylic acid 496-15-1, Indoline 498-94-2, Piperidine-4-carboxylic acid 498-95-3, Piperidine-3-carboxylic acid 504-78-9, Thiazolidine 506-87-6, Ammonium carbonate 534-03-2, 2-Aminopropane-1,3-diol 535-75-1, Piperidine-2-carboxylic acid 535-87-5 537-65-5, 4,4'-Diaminodiphenylamine 546-89-4, Lithium acetate 603-81-6, 2,3-Diaminobenzoic acid **608-08-2**, Indoxyl acetate 608-25-3, 2-Methylresorcinol 608-97-9, Benzenepentamine 610-74-2, 2,5-Diaminobenzoic acid 611-03-0, 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone 616-29-5, 1,3-Diamino-2-propanol 616-30-8, 2,3-Dihydroxypropylamine 616-43-3, 3-Methylpyrrole 619-05-6, 3,4-Diaminobenzoic acid 621-96-5, 4,4'-Diaminostilbene 625-84-3, 2,5-Dimethylpyrrole 631-61-8, Ammonium acetate 634-97-9, Pyrrole-2-carboxylic acid 636-41-9, 2-Methylpyrrole 929-06-6, 2-(2-Aminoethoxy)-ethanol 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1122-58-3, 4-Dimethylaminopyridine 1453-58-3, 3-Methylpyrazole 1477-50-5, 2-Indolecarboxylic acid 1571-72-8, 3-Amino-4-hydroxybenzoic acid 1918-77-0, Thiophene-2-acetic acid 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2836-32-0, Sodium glycolate 3204-61-3, 1,2,4,5-Tetraaminobenzene 3416-24-8, D-Glucosamine 4444-26-2, Benzenhexamine 4506-66-5, 1,2,4,5-Tetraaminobenzene tetrahydrochloride 5007-67-0, 3,3',4,4'-Tetraaminobenzophenone 5434-20-8, 3-Aminophthalic acid 6168-72-5, 2-Aminopropanol **7313-70-4**, Isatin-5-sulfonic acid 7336-20-1 7429-90-5D, Aluminum, salts 7439-89-6D, Iron, salts 7439-91-0D, Lanthanum, salts 7439-93-2D, Lithium, salts 7439-95-4D, Magnesium, salts 7439-96-5D, Manganese, salts 7440-00-8D, Neodymium, salts 7440-02-0D, Nickel, salts 7440-09-7D, Potassium, salts 7440-10-0D, Praseodymium, salts 7440-22-4D, Silver, salts 7440-23-5D, Sodium, salts 7440-24-6D, Strontium, salts 7440-32-6D, Titanium, salts

7440-39-3D, Barium, salts 7440-45-1D, Cerium, salts 7440-48-4D,
Cobalt, salts 7440-50-8D, Copper, salts 7440-54-2D, Gadolinium, salts
7440-66-6D, Zinc, salts 7440-70-2D, Calcium, salts 7535-00-4,
D-Galactosamine 7646-85-7, Zinc chloride, biological studies
13066-97-2 13531-52-7 14572-93-1, 2-(2,4-Diaminophenyl)ethanol
25448-04-8, Tetrahydroquinoline 27841-29-8 56344-32-2 66635-40-3
73793-79-0 74918-21-1 79352-72-0 81892-72-0, 1,3-Bis(2,4-
diaminophenoxy)-propane 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine
93841-24-8 126335-43-1 133914-70-2 159661-40-2 159661-41-3
159661-42-4 159661-43-5 159661-44-6 159661-45-7 159661-46-8
159959-66-7 159959-67-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(isatin-amine combinations as **hair dyes**)

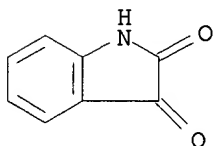
IT **91-56-5**, Isatin **91-56-5D**, Isatin, derivs.
608-08-2, Indoxyl acetate **7313-70-4**, Isatin-5-sulfonic
acid

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(isatin-amine combinations as **hair dyes**)

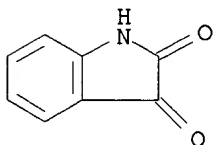
RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



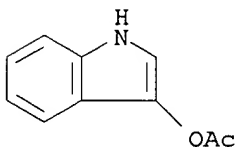
RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



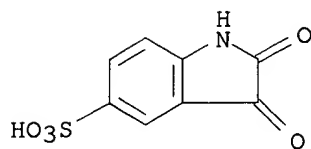
RN 608-08-2 HCAPLUS

CN 1H-Indol-3-ol, acetate (ester) (9CI) (CA INDEX NAME)



RN 7313-70-4 HCAPLUS

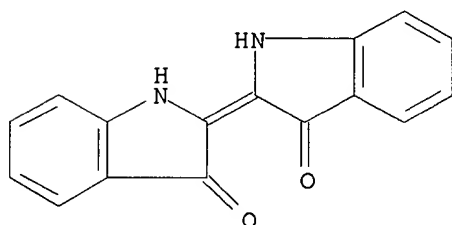
CN 1H-Indole-5-sulfonic acid, 2,3-dihydro-2,3-dioxo- (9CI) (CA INDEX NAME)



L48 ANSWER 37 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1994:200155 HCAPLUS
 DN 120:200155
 ED Entered STN: 16 Apr 1994
 TI MSolid hair dyeing **compositions** containing waxes, acid dyes, and acids
 IN Fukunishi, Akira; Goto, Masatoshi; Fujiwara, Risa
 PA Sanyo Chemical Ind Ltd, Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05279233	A2	19931026	JP 1992-143618	19920507
	JP 07068106	B4	19950726		
PRAI	JP 1991-318345		19911105		
	JP 1992-27126		19920117		
	JP 1992-56685		19920206		
AB	Water-soluble title compns., which are easily molded and applied to the hair without soiling the hand and neck, contain 30-99 weight% water-dispersible or water-soluble solid waxes, acid dyes, and water-soluble acidic substances. Polyethylene glycol 69.5, 4:3:4 Japan Orange 205:Japan Purple 401:Japan Black 401 mixture 1.5, citric acid 2, N-methylpyrrolidone 20, hydroxyethyl cellulose 4, and H2O 3 weight% were melted and molded to give a solid hair dye, which showed good softening property.				
ST	hair dye acid wax				
IT	Polyoxyalkylenes, biological studies				
	Waxes and Waxy substances				
	RL: BIOL (Biological study)				
	(solid hair dyeing compns. containing acid dyes and acids and)				
IT	Acids, biological studies				
	RL: BIOL (Biological study)				
	(solid hair dyeing compns. containing waxes and acid dyes and)				
IT	Monosaccharides				
	Oligosaccharides				
	Polysaccharides, biological studies				
	RL: BIOL (Biological study)				
	(solid hair dyeing compns. containing waxes and acid dyes and acids and)				
IT	Hair preparations				
	(dyes, solid, containing waxes and acid dyes and acids)				
IT	Fatty acids, compounds				
	RL: BIOL (Biological study)				
	(lanolin, reaction products, with (aminopropyl)ethyldimethylammonium, solid hair dyeing compns. containing waxes and acid dyes and acids and)				
IT	Alcohols, biological studies				

- RL: BIOL (Biological study)
(polyhydric, C2-6, solid hair dyeing compns. containing acid dyes and acids and)
- IT 50-70-4, Sorbitol, biological studies 9003-11-6, Ethylene oxide-propylene oxide copolymer 25322-68-3, Polyethylene glycol 25867-06-5, Ethylene oxide-styrene oxide copolymer 129342-85-4, Ethylene oxide-dodecene oxide-tetradecene oxide copolymer
RL: BIOL (Biological study)
(solid hair dyeing compns. containing acid dyes and acids and)
- IT 77-92-9, Citric acid, biological studies 7664-38-2, Phosphoric acid, biological studies
RL: BIOL (Biological study)
(solid hair dyeing compns. containing waxes and acid dyes and)
- IT 96-49-1, Ethylene carbonate 100-51-6, Benzyl alcohol, biological studies 122-19-0, Stearyldimethylbenzylammonium chloride 872-50-4, N-Methylpyrrolidone, biological studies 9004-32-4, CMC 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 66091-25-6D, acylated
RL: BIOL (Biological study)
(solid hair dyeing compns. containing waxes and acid dyes and acids and)
- IT **482-89-3**, Japan Blue 201 633-96-5, Japan Orange 205 1064-48-8, Japan Black 401 1103-39-5, Japan Red 206 2092-56-0, Japan Red 203 4403-90-1 4430-18-6, Japan Purple 401
RL: BIOL (Biological study)
(solid **hair dyeing** compns. containing waxes and acids and)
- IT **482-89-3**, Japan Blue 201
RL: BIOL (Biological study)
(solid **hair dyeing** compns. containing waxes and acids and)
- RN 482-89-3 HCAPLUS
- CN 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-(9CI) (CA INDEX NAME)



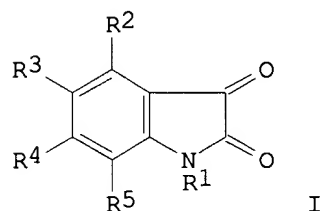
L48 ANSWER 38 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:678349 HCAPLUS
DN 119:278349
ED Entered STN: 25 Dec 1993
TI Dyeing of keratinaceous fibers with isatin derivatives
IN Hoeffkes, Horst; Buettner, Roswitha; Moeller, Hinrich
PA Henkel K.-G.a.A., Germany
SO Ger. Offen., 5 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM D06P003-04

ICS D06P003-14; D06P001-647; A61K007-13
ICA D06P003-60; D06P003-34; D06P003-40; D06P003-24; D06P003-70; D06P003-52;
C09B057-00

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4211450	A1	19931007	DE 1992-4211450	19920406
	WO 9319725	A1	19931014	WO 1993-EP755	19930329
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 634923	A1	19950125	EP 1993-907845	19930329
	EP 634923	B1	19951220		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
	AT 131720	E	19960115	AT 1993-907845	19930329
	ES 2081213	T3	19960216	ES 1993-907845	19930329
PRAI	DE 1992-4211450		19920406		
	DE 1993-4301818		19930123		
	WO 1993-EP755		19930329		
OS	MARPAT 119:278349				
GI					



AB Isatin and its derivs. I [R1 = H, (substituted) Ph or Bz, C1-4 alkyl, C2-4 hydroxyalkyl, acyl; R2-R5 = H, OH, NO2, halo, C1-4 alkyl or alkoxy, (substituted) amino, or 2 neighboring groups among R2-R5 comprise C1-4 alkylenedioxy], combined with an amino acid or water-soluble oligopeptide with 2-9 residues, are useful for dyeing keratinaceous fibers such as human hair. Thus, an aqueous **composition** containing carob meal 2.0, NaOAc 1.0, ascorbic acid 1.0, C12-18 fatty alc. Na sulfate 1.0, isatin 0.5, L-proline 0.5, DL-tryptophan 1.5 g/100 g, applied to blond hair, imparted a natural brown color.

ST isatin deriv hair dye; peptide isatin deriv hair dye; amino acid isatin deriv hair dye

IT Keratins
RL: BIOL (Biological study)
(fibers, dyes for, isatin derivative-amino acid and -peptide combinations as)

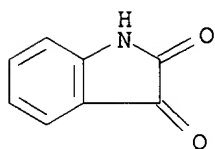
IT Peptides, biological studies
RL: BIOL (Biological study)
(hair dyes containing isatin derivs. and)

IT Amino acids, biological studies
RL: MSC (Miscellaneous)
(hair dyes containing isatin derivs. and)

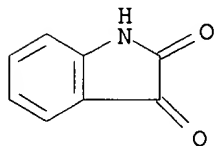
IT Hair preparations
(dyes, isatin derivative-amino acid and -peptide combinations as)

IT **91-56-5**, Isatin **91-56-5D**, Isatin, derivs.
RL: BIOL (Biological study)

(hair dyes containing amino acid or peptide and)
 IT 51-35-4, L-Hydroxyproline 52-90-4, L-Cysteine, miscellaneous 54-12-6,
 DL-Tryptophan 56-40-6, Glycine, miscellaneous 56-41-7, L-Alanine,
 miscellaneous 56-45-1, L-Serine, miscellaneous 56-84-8, L-Aspartic
 acid, miscellaneous 56-86-0, L-Glutamic acid, miscellaneous 56-87-1,
 L-Lysine, miscellaneous 56-89-3, L-Cystine, miscellaneous 61-90-5,
 L-Leucine, miscellaneous 63-68-3, L-Methionine, miscellaneous 63-91-2,
 L-Phenylalanine, miscellaneous 70-18-8, L-Glutathione, miscellaneous
 71-00-1, L-Histidine, miscellaneous 72-18-4, L-Valine, miscellaneous
 72-19-5, L-Threonine, miscellaneous 73-22-3, L-Tryptophan, miscellaneous
 73-32-5, L-Isoleucine, miscellaneous 74-79-3, L-Arginine, miscellaneous
 80-68-2, DL-Threonine
 RL: BIOL (Biological study)
 (hair dyes containing isatin derivs. and)
 IT 147-85-3, L-Proline, miscellaneous 150-30-1, DL-Phenylalanine
 302-84-1, DL-Serine 1596-67-4, L-Thyronine
 RL: MSC (Miscellaneous)
 (hair dyes containing isatin derivs. and)
 IT 91-56-5, Isatin 91-56-5D, Isatin, derivs.
 RL: BIOL (Biological study)
 (hair dyes containing amino acid or peptide and)
 RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



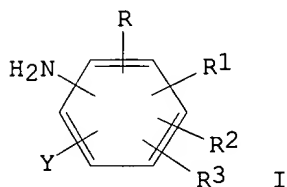
RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



L48 ANSWER 39 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1993:11497 HCAPLUS
 DN 118:11497
 ED Entered STN: 10 Jan 1993
 TI Hair dye comprising isatin or derivatives thereof associated with a tri-,
 tetra- or pentasubstituted aniline or a bisphenylalkylenediamine
 IN Lang, Gerard; Cotteret, Jean
 PA Oreal S. A., Fr.
 SO Eur. Pat. Appl., 15 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 502784	A1	19920909	EP 1992-400558	19920304
	EP 502784	B1	19950621		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, PT, SE				
	FR 2673533	A1	19920911	FR 1991-2615	19910305
	FR 2673533	B1	19930611		
	CA 2062280	AA	19920906	CA 1992-2062280	19920304
	US 5261926	A	19931116	US 1992-845586	19920304
	ES 2073876	T3	19950816	ES 1992-400558	19920304
	JP 04360818	A2	19921214	JP 1992-48491	19920305
	JP 3330625	B2	20020930		
PRAI	FR 1991-2615	A	19910305		
OS	MARPAT 118:11497				
GI					



AB Hair dyes comprise isatin or isatin derivs. (Markush given) and a bisphenylalkylenediamine or an aniline derivative I [Y = OH, (un)substituted NH₂; R - R₃ = H, alkyl, Cl, acetyl amino, alkoxy, aryloxy]. A **composition** (pH 8; triethanolamine) comprised isatin 1, 2,6-dimethyl-1,4-diaminobenzene 1, EtOH 30 and water to 100 g.

ST hair dye isatin aniline deriv; phenylalkylenediamine isatin deriv hair dye

IT Hair preparations
(dyes, isatin and aniline derivs.-containing)

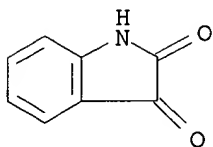
IT **91-56-5**, Isatine 1129-15-3, 4,6-Dimethoxy-1,3-diaminobenzene 3096-69-3, 2,3-Dimethyl-4-aminophenol 3096-70-6, 3,5-Dimethyl-4-aminophenol 3096-71-7, 2,5-Dimethyl-4-aminophenol 5306-96-7 5307-00-6 **6326-79-0** 6393-01-7 7218-02-2, 2,6-Dimethyl-1,4-diaminobenzene 10486-46-1, 2,3,5-Trimethyl-4-aminophenol 13438-26-1, 2,6-Dimethyl-1,3-diaminobenzene 14090-00-7 15980-22-0, 2,6-Dimethyl-4-aminophenol 37418-76-1 46010-72-4, 2,3,5,6-Tetramethyl-4-aminophenol 56331-36-3 63969-43-7 90086-91-2, 2,5-Dimethyl-3-aminophenol 100525-89-1 101251-28-9, 3-Methyl-6-methoxy-1,2-diaminobenzene 101252-48-6, 5,6-Dimethoxy-1,3-diaminobenzene 115423-86-4, 2,6-Dimethoxy-1,3-diaminobenzene 120552-62-7, 2,6-Dimethoxy-5-chloro-1,3-diaminobenzene 121908-48-3 121908-49-4 127726-17-4 128729-30-6 128729-31-7 130582-53-5 135855-34-4 144680-95-5, 4,6-Dibenzoyloxy-1,3-diaminobenzene 144680-96-6 144680-97-7 144680-98-8 144977-93-5

RL: BIOL (Biological study)
(**hair dye** containing)

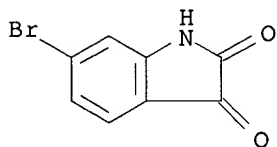
IT **91-56-5**, Isatine **6326-79-0**
RL: BIOL (Biological study)
(**hair dye** containing)

RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)

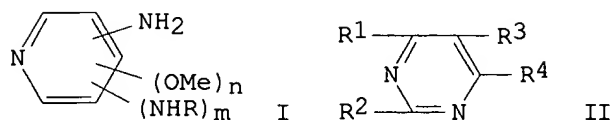


RN 6326-79-0 HCAPLUS
 CN 1H-Indole-2,3-dione, 6-bromo- (9CI) (CA INDEX NAME)



L48 ANSWER 40 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1992:657972 HCAPLUS
 DN 117:257972
 ED Entered STN: 26 Dec 1992
 TI Hair dye comprising isatin or derivatives thereof associated with an
 aminopyridine derivative
 IN Lang, Gerard; Cotteret, Jean
 PA Oreal S. A., Fr.
 SO Eur. Pat. Appl., 14 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 502783	A1	19920909	EP 1992-400557	19920304
	EP 502783	B1	19950503		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, PT, SE				
	FR 2673532	A1	19920911	FR 1991-2614	19910305
	FR 2673532	B1	19930611		
	US 5279616	A	19940118	US 1992-845587	19920304
	AT 121930	E	19950515	AT 1992-400557	19920304
	ES 2072108	T3	19950701	ES 1992-400557	19920304
	CA 2062359	AA	19920906	CA 1992-2062359	19920305
	JP 04368318	A2	19921221	JP 1992-48492	19920305
	JP 3330626	B2	20020930		
	US 5340366	A	19940823	US 1993-136125	19931015
PRAI	FR 1991-2614	A	19910305		
	US 1992-845587	A1	19920304		
OS	MARPAT 117:257972				
GI					



AB Isatin or an isatin derivative (Markush given), associated with a dimethylpyridine derivative I ($R = H, 2\text{-HOCH}_2\text{CH}_2$; $m = 0, 1$; $n = m, 2$) or a pyrimidine derivative II [$R_1 = (\text{un})\text{substituted NH}_2$; $R_2 = H, OH, R_1$; $R_3 = H, NH_2$; $R_4 = OH, R_1$] is a hair dye. A **composition** (pH 7.6; triethanolamine) comprised isatin 1, tetraaminopyrimidine 1, EtOH 30, and water to 100 g.

ST hair dye isatin pyridine pyrimidine

IT Hair preparations
(dyes, isatin and pyridine derivs.-containing)

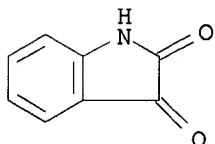
IT 54-96-6, 3,4-Diaminopyridine **91-56-5**, Isatine 452-58-4, 2,3-Diaminopyridine 504-29-0, 2-Aminopyridine 1004-74-6, Tetraaminopyrimidine 2434-56-2, 4,6-Diaminopyrimidine 3240-72-0, 5,6-Diamino-2,4-dihydroxypyrimidine 4318-76-7, 2,5-Diaminopyridine **17630-76-1** 28020-38-4, 6-Methoxy-2,3-diaminopyridine 85679-78-3, 2,6-Dimethoxy-3,5-diaminopyridine

RL: BIOL (Biological study)
(hair dye containing)

IT **91-56-5**, Isatine **17630-76-1**
RL: BIOL (Biological study)
(hair dye containing)

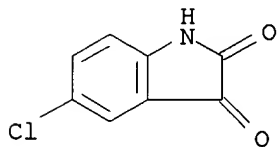
RN 91-56-5 HCAPLUS

CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



RN 17630-76-1 HCAPLUS

CN 1H-Indole-2,3-dione, 5-chloro- (9CI) (CA INDEX NAME)



L48 ANSWER 41 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:578123 HCAPLUS

DN 117:178123

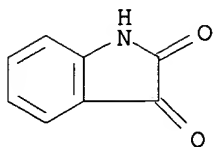
ED Entered STN: 01 Nov 1992

TI hair dye preparation containing isatine and an aminoindole or an aminoindoline derivative.

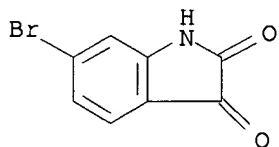
IN Lang, Gerard; Cotteret, Jean

PA Oreal S. A., Fr.
 SO Eur. Pat. Appl., 15 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-4 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 497697	A1	19920805	EP 1992-400237	19920130
	EP 497697	B1	19951206		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, PT, SE				
	FR 2672210	A1	19920807	FR 1991-1186	19910201
	FR 2672210	B1	19930521		
	US 5190564	A	19930302	US 1992-828299	19920130
	AT 131035	E	19951215	AT 1992-400237	19920130
	ES 2089431	T3	19961001	ES 1992-400237	19920130
	CA 2060488	AA	19920802	CA 1992-2060488	19920131
	JP 04338321	A2	19921125	JP 1992-16805	19920131
PRAI	FR 1991-1186		19910201		
OS	MARPAT 117:178123				
AB	A hair dye composition contained isatine 1, 6-aminoindole 1, EtOH 30 (pH 8.1), and water 100 by weight The composition gave a copper color to the 90% gray hair.				
ST	hair dye isatin aminoindole aminoindoline				
IT	Hair preparations (dyes, isatine and aminoindole or aminoindoline derivs. in)				
IT	91-56-5 , Isatine 6326-79-0 RL: BIOL (Biological study) (hair dye composition containing aminoindole or aminoindoline derivs. and)				
IT	5192-23-4, 4-Aminoindole RL: BIOL (Biological study) (hair dye composition containing isatin and)				
IT	5192-03-0, 5-Aminoindole 5192-04-1, 7-Aminoindole 5318-27-4, 6-Aminoindole 15918-79-3, 6-Aminoindoline 53918-91-5, 2,3,5-Trimethyl-6-aminoindole 61698-44-0, 2,3-Dimethyl-6-aminoindole 102308-53-2, 2-Methyl-6-aminoindole 130659-01-7, 2,3-Dimethyl-5-hydroxy- 6-aminoindole 130659-02-8, 2,3-Dimethyl-5-amino-6-hydroxyindole 135855-49-1, 2,3,4-Trimethyl-6-aminoindole 135855-52-6, 2,3-Dimethyl-5-ethyl-6-aminoindole hydrochloride 135855-53-7, 2,3,4,5-Tetramethyl-6-aminoindole hydrochloride 135855-58-2, 2,3-Dimethyl-5-amino-6-methoxyindole 135855-59-3, 2,3-Dimethyl-5-methoxy- 6-aminoindole 135855-65-1, 2,3,4,5-Tetramethyl-6-aminoindole 135855-66-2 135855-67-3, 2,3-Dimethyl-5-ethyl-6-aminoindole 135855-68-4, 2-Methyl-5-hydroxy-6-aminoindole 135855-69-5, 2,3,7-Trimethyl-6-aminoindole 135855-75-3 143543-67-3 143650-52-6, 2,3-Dimethyl-6-aminoindole hydrochloride 143650-53-7, 2,3-Dimethyl-6-methoxy-5-aminoindole hydrochloride RL: BIOL (Biological study) (hair dye composition containing isatine and)				
IT	91-56-5 , Isatine 6326-79-0 RL: BIOL (Biological study) (hair dye composition containing aminoindole or aminoindoline derivs. and)				
RN	91-56-5 HCAPLUS				
CN	1H-Indole-2,3-dione (9CI) (CA INDEX NAME)				



RN 6326-79-0 HCAPLUS
CN 1H-Indole-2,3-dione, 6-bromo- (9CI) (CA INDEX NAME)



L48 ANSWER 42 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:566372 HCAPLUS
DN 115:166372
ED Entered STN: 18 Oct 1991
TI Hair dyeing **compositions** containing metals
IN Mizumaki, Katsumi
PA Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K007-13
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03017008	A2	19910125	JP 1989-150853	19890615
PRAI	JP 1989-150853		19890615		

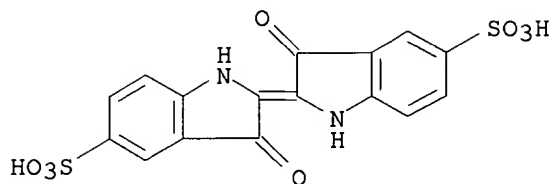
AB Hair dyeing compns. contain Co, Ni, Cr, and/or Mn and (i) substances containing sulfur ion, SH-, colloidal S, and/or solubilized S, (ii) phenolic OH-containing organic compds. (except pyrogallol-Co and -Ni combination), (iii) CO₂H-containing organic compds., and/or (i.v.) natural substances. Hair was treated with an aqueous solution (100 mL) containing CoSO₄·7H₂O 2.50, CuSO₄·5H₂O 0.08, NiSO₄ 0.45, and 28% ammonia 8.50 g, left for 20 min, and sprayed with an aqueous solution (100 mL) containing 5.0 g (NH₄)₂S and tannic acid to develop dark brown color.

ST hair dye metal tannic acid; sulfur phenol metal dye hair; carboxylate metal dye hair

IT Cork tree (Phellodendron)
Rhubarb
Sage
Swertia japonica
(extract of, hair dyeing compns. containing metals and)

IT Gambier
Carboxylic acids, biological studies

Phenols, biological studies
Tannins
RL: BIOL (Biological study)
(hair dyeing compns. containing metals and)
IT Cocoa (Theobroma cacao)
Corn
(pigment of, hair dyeing compns. containing metals and)
IT Scutellaria baicalensis
(root, extract of, hair dyeing compns. containing metals and)
IT Pharmaceutical natural products
RL: BIOL (Biological study)
(Wubeizhi, hair dyeing compns. containing metals and)
IT Hair preparations
(dyes, containing metals and sulfur compds. and/or phenols and/or
carboxylic acids)
IT Beet
(red, pigment of, hair dyeing compns. containing metals and)
IT 7704-34-9, Sulfur, uses and miscellaneous
RL: USES (Uses)
(colloidal, hair dyeing compns. containing metals and)
IT 87-66-1, Pyrogallol 88-89-1, Picric acid 90-15-3, α -Naphthol
96-91-3, Picramic acid 118-92-3, Anthranilic acid 119-34-6,
4-Amino-2-nitrophenol 134-03-2, Sodium ascorbate 137-09-7, Amidol
148-24-3, 8-Hydroxyquinoline, uses and miscellaneous 149-91-7, Gallic
acid, biological studies 153-18-4, Rutin 154-23-4, Catechol
275-51-4, Azulene 458-37-7, Curcumin 475-25-2, Hematein 499-44-5,
Hinokitiol 615-05-4 **860-22-0**, Indigo carmine 1260-17-9,
Carminic acid 1319-77-3, Cresol 1343-78-8, Cochineal (dye)
1393-63-1, Annatto (dye) 2086-83-1, Berberine 8005-33-2, C.I. Natural
black 1 11006-34-1 12135-76-1, Ammonium sulfide 18496-25-8, Sulfide
32627-52-4, Iron chlorophyllin sodium 35421-08-0, 4-Chloromethylphenol
38886-21-4 50-81-7, Ascorbic acid, uses and miscellaneous 68-11-1,
Thioglycolic acid, biological studies
RL: BIOL (Biological study)
(hair dyeing compns. containing metals and)
IT 71-48-7, Cobalt acetate 5931-89-5, Cobalt acetate 7785-87-7, Manganese
sulfate [MnSO₄] 7786-81-4, Nickel sulfate 10101-53-8, Chromium sulfate
[Cr₂(SO₄)₃] 10124-43-3, Cobalt sulfate (CoSO₄)
RL: BIOL (Biological study)
(hair dyeing compns. containing sulfur compds. and phenols and carboxylic
acids and)
IT **860-22-0**, Indigo carmine
RL: BIOL (Biological study)
(hair dyeing compns. containing metals and)
RN 860-22-0 HCAPLUS
CN 1H-Indole-5-sulfonic acid, 2-(1,3-dihydro-3-oxo-5-sulfo-2H-indol-2-
ylidene)-2,3-dihydro-3-oxo-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

L48 ANSWER 43 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:49342 HCAPLUS

DN 114:49342

ED Entered STN: 09 Feb 1991

TI Wave-setting hair dye.

IN Watanabe, Katsuhiko; Ono, Tatsuo; Ota, Toshio; Minei, Tadayuki; Horikoshi, Toshio

PA San-Ei Kagaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-13

ICS A61K007-09

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02076807	A2	19900316	JP 1989-150744	19890614
	JP 2842621	B2	19990106		
PRAI	JP 1988-149043		19880616		

AB The title preparation consists of **composition A** and **B**. The **compon**
 . A contains (1) ≥ 1 reducing agent (2-19% by weight) selected from
 mercapto compds., sulfites, and bisulfites, (2) an alkali (0.01-15.0%),
 (3), a water-soluble polymer (0.1-10.0%), or a mixture of the polymer (or a
 higher alc.) 1-30% and an anion activator 0.1-8.0%, or a combination of
 the components, with the viscosity of 100-40,000 cP and pH 2-12. The
composition B consists of (1) ≥ 1 dye 1-30% by weight, (2) a
 water-soluble polymer 0.1-10.0%, or a mixture of the polymer (or a higher alc.)
 1-30 and an anion activator 0.1-8.0%, or a combination of the components,
 with the viscosity of 30-50,000 cP. The hair preparation may also contain
 0.5-25% oxidizing agent consisting of (1) ≥ 1 compound selected from
 bromates, perborates, H₂O₂, persulfates, and peracetates, and (2)
 ≥ 1 compound selected from cation activators, amphoteric and anion
 activators. It may also contain alcs., other cation activators,
 amphoteric activators, and soluble polymers. Numerous components are listed.

ST hair wavesetter dye

IT Alcohols, biological studies

Alkali metals, biological studies

Mercapto compounds

Polymers, biological studies

Sulfites

RL: BIOL (Biological study)

(hair wave-setting and dye compns. containing)

IT Hair preparations
(dyes, containing wave-setting agents)

IT Sulfites
RL: BIOL (Biological study)
(hydrogen, hair wave-setting and dye compns. containing)

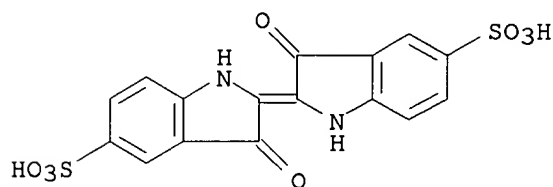
IT Hair preparations
(wave-setting, containing dyes)

IT 52-89-1, L-Cysteine hydrochloride 57-50-1D, Sucrose, acetylated
102-71-6, Triethanolamine, biological studies 112-02-7,
Cetyltrimethylammonium chloride 112-03-8 112-72-1, Myristyl alcohol
112-92-5, Stearyl alcohol 123-03-5, Cetylpyridinium chloride 124-28-7,
Stearyltrimethylamine 139-96-8, Lauryl sulfate triethanolamine salt
141-43-5, Monoethanolamine, biological studies 151-21-3, Sodium lauryl
sulfate, biological studies 518-47-8 523-44-4, Japan Orange 402
587-98-4, Japan Yellow 406 683-10-3, Lauryldimethylaminoacetic acid
betaine 846-70-8 **860-22-0**, Japan Blue 2 915-67-3, Japan Red
2 1064-48-8, Japan Black 401 1120-01-0, Sodium cetyl sulfate
1658-56-6, Japan Red Number 506 1934-21-0, Japan Yellow 4 2321-07-5,
Japan Yellow 201 2353-45-9, Japan Green 3 2650-18-2, Japan Blue 205
2783-94-0, Japan Yellow 5 3374-30-9, Japan Blue 203 3520-42-1, Japan
Red 106 3564-09-8, Japan Red 502 3567-66-6, Japan Red 227 3761-53-3,
Japan Red Number 503 3844-45-9, Japan Blue 1 4403-90-1, Japan Green 201
4430-18-6, Japan Purple 401 4680-78-8, Japan Green Number 402 5141-20-8,
Japan Green Number 205 5421-46-5, Ammonium thioglycolate 6252-76-2, Japan
Red 401 6358-69-6, Japan Green 204 6372-96-9, Japan Yellow Number 402
6417-61-4, Japan Blue Number 202 6417-85-2 7722-84-1, Hydrogen peroxide,
biological studies 7789-38-0, Sodium bromate 9003-04-7, Aronvis S
9003-39-8, PVP-K 90 17301-53-0 17372-87-1 18472-87-2, Japan Red 104
19381-50-1, Japan Green 401 26062-79-3, Merquat 100 26590-05-6,
Merquat 550 28880-55-9 33239-19-9, Japan Orange Number 207 36653-82-4,
Cetyl alcohol 53633-54-8, Gafquat 755 76050-42-5, Carbopol-940
81859-24-7, Leogard G
RL: BIOL (Biological study)
(**hair** wave-setting and **dye** compns. containing)

IT **860-22-0**, Japan Blue 2
RL: BIOL (Biological study)
(**hair** wave-setting and **dye** compns. containing)

RN 860-22-0 HCAPLUS

CN 1H-Indole-5-sulfonic acid, 2-(1,3-dihydro-3-oxo-5-sulfo-2H-indol-2-ylidene)-2,3-dihydro-3-oxo-, disodium salt (9CI) (CA INDEX NAME)



● 2 Na

AN 1988:555956 HCAPLUS
 DN 109:155956
 ED Entered STN: 28 Oct 1988
 TI An aqueous **composition** for treatment of keratinous fibers, its manufacture and use for treating human hair
 IN Hefford, Robert John Warwick; Murray, Andrew Malcolm
 PA Unilever PLC, UK; Unilever N. V.
 SO Eur. Pat. Appl., 18 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM A61K007-06
 ICS A61K007-13; D06M015-21; D06P001-52
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 257807	A2	19880302	EP 1987-306627	19870728
	EP 257807	A3	19890118		
	EP 257807	B1	19921007		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	CA 1298786	A1	19920414	CA 1987-542987	19870724
	AU 8776173	A1	19880204	AU 1987-76173	19870727
	AU 600738	B2	19900823		
	JP 63035514	A2	19880216	JP 1987-187488	19870727
	JP 2575141	B2	19970122		
	IN 166205	A	19900331	IN 1987-BO241	19870727
	AT 81280	E	19921015	AT 1987-306627	19870728
	ES 2052567	T3	19940716	ES 1987-306627	19870728
	BR 8703904	A	19880405	BR 1987-3904	19870729
	ZA 8705588	A	19890329	ZA 1987-5588	19870729
	US 4943430	A	19900724	US 1989-358467	19890530
	IN 170478	A	19920328	IN 1989-BO269	19891003
PRAI	GB 1986-18634		19860730		
	US 1987-74838		19870717		
	IN 1987-BO241		19870727		
	EP 1987-306627		19870728		

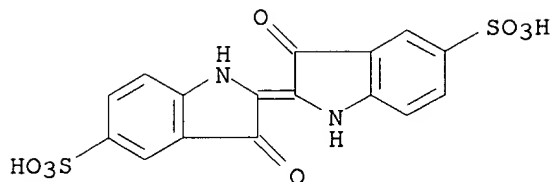
OS MARPAT 109:155956

AB An aqueous single-phase **composition**, particularly for treatment of keratinous fibers, comprises ≥ 1 cationic polymer 0.1-10, ≥ 1 anionic monomer 0.01-10, and ≥ 1 solubilizing agent selected from amphoteric detergent active compds. 0.1-20 and inorg. electrolytes 1-30 weight%. The anionic monomer may be a food dye or a sunscreen agent. The amphoteric solubilizing agent may be a betaine; the inorg. electrolyte may be a chloride, bromide, or nitrate of an alkali or alkaline earth metal, ammonium, or substituted ammonium. The anionic-cationic charge ratio is preferably $< 0.7:1$. The **composition** is prepared by mixing the oppositely charged ingredients in the presence of the solubilizing agent. The aqueous **composition** is applied to wet hair as a solution diluted ≥ 10 times with water. A single liquid phase clear hair dyeing **composition** contains Merquat 100 (40% solution) 2.5, Acid Black I 0.5, Empigen BB (30% solution) 2.7, NaCl 12 weight%, and balance water with pH 6.0. Blond hair swatches treated with 0.25 g of the formulation diluted with 2.25 g water for 2 min and then rinsed were dyed a strong, intense blue color.

ST cationic polymer hair dye; anionic monomer hair dye; amphoteric detergent solubilization hair dye; electrolyte inorg solubilization hair dye

IT Bromides, biological studies
 Chlorides, biological studies

- Nitrates, biological studies
 RL: BIOL (Biological study)
 (solubilizing electrolyte, for anionic and cationic components of hair dyes)
- IT Betaines
 RL: BIOL (Biological study)
 (C12-14-alkyldimethyl, amphoteric solubilizing agent, for anionic and cationic components of hair dyes)
- IT Hair preparations
 (dyes, anionic monomers and cationic polymers and amphoteric or electrolytic solubilizing agents in)
- IT 59355-60-1, Empigen BT
 RL: BIOL (Biological study)
 (amphoteric solubilizing agent, for anionic and cationic components of hair dyes)
- IT **860-22-0**, Food blue 1 1064-48-8 1934-21-0 2519-30-4, Food black 1 2611-82-7, Food red 7 3567-69-9, Food red 3 3734-67-6, Food red 10 4553-89-3 8004-92-0, C.I. Acid Yellow 3 8005-03-6, Acid black 2
 RL: BIOL (Biological study)
 (anionic **dye**, in **hair dyes**)
- IT 830-09-1D, salts 56265-46-4, Parsol hydro 116751-94-1
 RL: BIOL (Biological study)
 (anionic sunscreen, in hair dyes)
- IT 2867-47-2, Dimethylaminoethyl methacrylate 9002-89-5D, Poly(vinyl alcohol), quaternized 9002-98-6 9003-39-8, Poly(n-vinylpyrrolidone) 9003-47-8, Poly(vinylpyridine) 25154-86-3, Poly(dimethylaminoethyl methacrylate) 26062-79-3, Poly(dimethyldiallylammonium chloride) 26062-81-7 61686-26-8 63451-27-4, Mirapol A-15 75345-27-6, Onamer M 87582-56-7, Poly(vinylpyridinium chloride) 116656-62-3
 RL: BIOL (Biological study)
 (cationic polymer, in hair dyes)
- IT 7647-14-5, Sodium chloride, biological studies
 RL: BIOL (Biological study)
 (solubilizing electrolyte, for anionic and cationic components of hair dyes)
- IT 151-21-3D, Sodium lauryl sulfate, ethoxylated 39464-69-2, Briphos O3D
 RL: BIOL (Biological study)
 (surfactant, in hair dyes)
- IT **860-22-0**, Food blue 1
 RL: BIOL (Biological study)
 (anionic **dye**, in **hair dyes**)
- RN 860-22-0 HCAPLUS
- CN 1H-Indole-5-sulfonic acid, 2-(1,3-dihydro-3-oxo-5-sulfo-2H-indol-2-ylidene)-2,3-dihydro-3-oxo-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

L48 ANSWER 45 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1987:520859 HCAPLUS

DN 107:120859

ED Entered STN: 05 Oct 1987

TI Hair dye

IN Rosenbaum, Georges; Cotteret, Jean

PA Oreal S. A., Fr.

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM A61K007-13

ICS D06P003-04; A61K007-09

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3635147	A1	19870416	DE 1986-3635147	19861015
	DE 3635147	C2	19951130		
	FR 2588473	A1	19870417	FR 1985-15311	19851016
	FR 2588473	B1	19880610		
	CH 673944	A	19900430	CH 1986-4113	19861015
	BE 905607	A1	19870416	BE 1986-217297	19861016
	JP 62093218	A2	19870428	JP 1986-244291	19861016
	JP 07008776	B4	19950201		
	GB 2181750	A1	19870429	GB 1986-24871	19861016
	GB 2181750	B2	19890913		
	US 4750908	A	19880614	US 1986-919491	19861016
	CA 1274178	A1	19900918	CA 1986-520651	19861016
PRAI	FR 1985-15311		19851016		

AB Isatin, especially combined with known 2- or 5-hydroxynaphthoquinone or benzoquinone dyes, is a yellow hair dye. Thus, a **composition** contained isatin 1.5, 2-hydroxy-3-methyl-1,4-naphthaoquinone 1, citric acid 1, absolute EtOH 28.5 and Sinnopal Np9 100 g.

ST hair dye isatin

IT Hair preparations

(dyes, isatin-containing)

IT **91-56-5**, Isatin

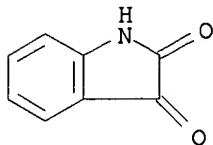
RL: BIOL (Biological study)

(hair dye containing)

IT 85-23-4 483-55-6 605-37-8, 2,3-Dihydroxy-1,4-naphthoquinone
15127-94-3

RL: BIOL (Biological study)

(hair dye containing isatin and)
 IT 91-56-5, Isatin
 RL: BIOL (Biological study)
 (hair dye containing)
 RN 91-56-5 HCAPLUS
 CN 1H-Indole-2,3-dione (9CI) (CA INDEX NAME)



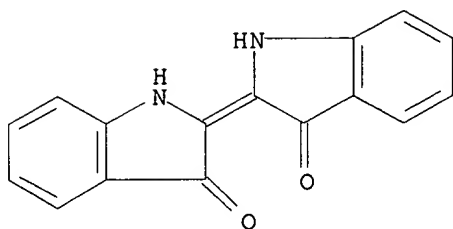
L48 ANSWER 46 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1985:583378 HCAPLUS
 DN 103:183378
 ED Entered STN: 30 Nov 1985
 TI Hair dye **composition** containing a mixture of non-exhausted vegetable powder, a direct dye of a natural origin, and a diluent
 IN Rosenbaum, Georges; Cotteret, Jean; Grollier, Jean Francois
 PA Fr.
 SO Can., 23 pp.
 CODEN: CAXXA4
 DT Patent
 LA French
 IC A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 1179269	A1	19841211	CA 1982-397260	19820226
	FR 2500748	A1	19820903	FR 1981-3946	19810227
	FR 2500748	B1	19840803		
	BE 892298	A1	19820826	BE 1982-207426	19820226
	GB 2093868	A	19820908	GB 1982-5831	19820226
	GB 2093868	B2	19840620		
	DE 3207037	A1	19820916	DE 1982-3207037	19820226
	JP 57158716	A2	19820930	JP 1982-30436	19820226
	CH 651470	A	19850930	CH 1982-1206	19820226
	US 5447538	A	19950905	US 1992-951195	19920928
PRAI	FR 1981-3946	A	19810227		
	US 1982-352103	B1	19820225		
	US 1983-541685	B1	19831013		
	US 1987-50423	B1	19870518		
	US 1991-782128	B2	19911025		

AB Hair dyes are made of a nonextd. plant powder (95% of the particles <180 μ), a natural dye (maclurin [519-34-6], brasilin [474-07-7], etc.) and a solid diluting agent. The diluting agent should have a viscosity <150 cP in 40% solution of dispersion. Thus, a **composition** is given, containing chestnut leaf powder 40, henna leaf powder 15, Unipectin (carob polysaccharide) 3, lawsone [83-72-7] 1, citric acid 4, and fat-free milk powder to 100 g. The **composition** is mixed with 3.5 times its weight of water, prior to use.

ST hair dye plant powder natural
 IT Alder

Cinchona
 (bark powder, hair dye containing)
 IT Carnation
 Chamomile
 Hibiscus
 (flower powder, hair dye containing)
 IT Chestnut
 Horse chestnut
 Lawsonia inermis
 Walnut
 (leaf powder, hair dye containing)
 IT Anise
 Asperula
 Barley
 Basil
 Carthamus
 Cinnamon (horticultural common name)
 Corn
 Goldenrod
 Hawthorn
 Lichen
 Logwood
 Marjoram
 Matricaria
 Reseda luteola
 Rye
 Sandalwood
 Soapwort
 Thyme
 Wheat
 (powder, hair dye containing)
 IT Curcuma
 Lawsonia inermis
 Madder (Rubia)
 Licorice
 RL: BIOL (Biological study)
 (root powder, hair dye containing)
 IT Hair preparations
 (dyes, natural dyes and plant powders for)
 IT Plantain
 (P. psyllium, powder, hair dye containing)
 IT 72-48-0 81-54-9 83-72-7 85-66-5 129-43-1 130-15-4 139-85-5
 458-37-7 474-07-7 476-41-5 478-43-3 481-39-0 481-72-1 481-74-3
482-89-3 517-28-2 519-34-6 569-77-7 605-32-3 1260-17-9
 18499-92-8
 RL: BIOL (Biological study)
 (**hair dye** containing)
 IT 1393-63-1
 RL: BIOL (Biological study)
 (seed powder, hair dye containing)
 IT **482-89-3**
 RL: BIOL (Biological study)
 (**hair dye** containing)
 RN 482-89-3 HCAPLUS
 CN 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-
 (9CI) (CA INDEX NAME)



L48 ANSWER 47 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1985:119424 HCAPLUS
 DN 102:119424
 ED Entered STN: 06 Apr 1985
 TI Hair dye **compositions** containing vegetable extracts
 IN Melin, Christian
 PA Muller, Alban, International S.a r.l., Fr.
 SO Fr. Demande, 16 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 IC A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2543434	A1	19841005	FR 1983-5414	19830401
	FR 2543434	B1	19860314		
	EP 124393	A1	19841107	EP 1984-400609	19840327
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 59184117	A2	19841019	JP 1984-61248	19840330
PRAI	FR 1983-5414		19830401		

AB Semipermanent direct and reversible hair dye compns. contain a mixture of at least 1 coloring extract and/or dyes of vegetable origin which could be in the form of metal complexes, and liquid penetration agents. Thus, an extract of log wood containing hemotoxylin [517-28-2]/hematin [475-25-2] as Co2+ complexes 6.5, BuOH [71-36-3] 1.5 and Cellosolve 2.0 mL, preservative 0.1, natural vegetable flavor 0.05 and an aqueous gel with 2% polyglucose to 100 mL was mixed to give a hair preparation The **composition** applied to natural white or blond hair colors it black after rinsing with 2.5% aqueous Na2CO3 solution

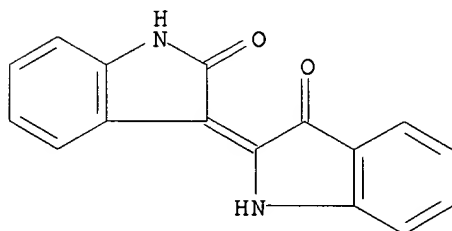
ST hair dye vegetable ext

IT Carotenes and Carotenoids, biological studies
 Flavanols
 Flavones
 RL: BIOL (Biological study)
 (hair dye compns. containing)

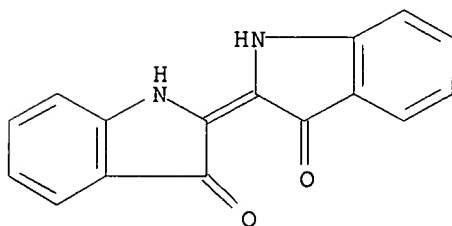
IT Eucalyptus
 Lawsonia inermis
 Madder (Rubia)
 Matricaria
 Sophora
 Vegetable
 (hair dye compns. containing exts. of)

IT Alcohols, biological studies
 Glycols, biological studies
 RL: BIOL (Biological study)

(hair dye compns. containing vegetable exts. and)
 IT Hair preparations
 (dyes, vegetable exts. and liquid penetration agents for)
 IT Flavones
 RL: BIOL (Biological study)
 (iso-, hair dye compns. containing)
 IT Madder (Rubia)
 (R. tinctorum, hair dye compns. containing exts. of)
 IT 72-48-0 81-54-9 82-08-6 83-72-7 84-79-7 117-02-2 118-10-5
 149-91-7, uses and miscellaneous 154-23-4 474-07-7 475-25-2
 476-66-4 **479-41-4** 481-39-0 **482-89-3** 487-24-1
 487-26-3D, derivs. 487-52-5 490-46-0 492-14-8 517-28-2 517-88-4
 518-82-1 518-83-2 519-34-6 600-76-0 1397-70-2D, derivs.
 6983-79-5 7429-90-5D, dye complexes 7440-02-0D, dye complexes
 7440-31-5D, dye complexes 7440-48-4D, dye complexes 7440-50-8D, dye
 complexes 7440-66-6D, dye complexes
 RL: BIOL (Biological study)
 (hair dye compns. containing)
 IT 57-55-6, biological studies 64-17-5, biological studies 67-56-1,
 biological studies 67-63-0, biological studies 71-23-8, biological
 studies 71-36-3, biological studies 107-21-1, biological studies
 25265-71-8 25265-75-2
 RL: BIOL (Biological study)
 (hair dye compns. containing vegetable exts. and)
 IT **479-41-4** **482-89-3**
 RL: BIOL (Biological study)
 (hair dye compns. containing)
 RN 479-41-4 HCAPLUS
 CN 2H-Indol-2-one, 3-(1,3-dihydro-3-oxo-2H-indol-2-ylidene)-1,3-dihydro-
 (9CI) (CA INDEX NAME)



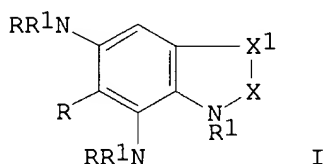
RN 482-89-3 HCAPLUS
 CN 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-
 (9CI) (CA INDEX NAME)



L48 ANSWER 48 OF 48 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1979:56337 HCAPLUS
 DN 90:56337
 ED Entered STN: 12 May 1984
 TI Hair coloring **composition**
 IN Rose, David; Busch, Peter; Lieske, Edgar
 PA Henkel K.-G.a.A., Fed. Rep. Ger.
 SO Ger. Offen., 18 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC C07D209-08
 CC 40-9 (Dyes, Fluorescent Whitening Agents, and Photosensitizers)
 Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2716671	A1	19781019	DE 1977-2716671	19770415
PRAI	DE 1977-2716671		19770415		
GI					



AB Diaminoindolines, diaminoisatins, or diaminooxoindoles of general structure I (R, R1 = H, C1-4 alkyl; X, X1 = CRR1 or CO) are used as couplers with amine developers, especially tetraaminopyrimidines, for oxidative **dyeing** of human **hair**. Brown to violet shades are obtained. Thus, 0.01 mol 5,7-diaminoisatin di-HCl [68837-94-5] and 0.01 mol 2,4,5,6-tetraaminopyrimidine [1004-74-6] were mixed with an emulsion comprising C12-18 fatty alc. 10, Na C12-18 fatty alc. sulfate 10, and H2O 75 parts, and the **composition** was adjusted to pH 9.5 and diluted with H2O to 100 parts by weight to give a cream which **dyes** 90%-gray human **hair** violet-blue (air oxidation) or violet-black (1% H2O2).

ST hair dye oxidative; isatin coupler hair dye; indole complex hair dye; aminoisatin coupler hair dye; aminoindole coupler hair dye; pyrimidine tetraamino developer hair dye; aminopyrimidine developer hair dye

IT Hair preparations
 (dyes, oxidative, diaminoindole derivs. as couplers in)

IT 62796-79-6 68837-91-2 68837-92-3 **68837-94-5** 68837-95-6
 RL: USES (Uses)
 (coupling agent, oxidative **hair dye** compns. containing)

IT 1004-74-6 56797-26-3 61604-24-8 62496-01-9 62496-02-0
 RL: USES (Uses)
 (developing agent, oxidative hair dye compns. containing)

IT 4375-15-9 6872-06-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (nitration of)

IT 34449-37-1P 68837-93-4P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and reduction of)

IT 5453-79-2 30490-21-2 67932-53-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of)

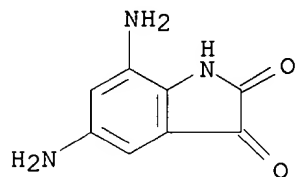
IT **68837-94-5**

RL: USES (Uses)

(coupling agent, oxidative **hair dye** compns. containing)

RN 68837-94-5 HCAPLUS

CN 1H-Indole-2,3-dione, 5,7-diamino-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

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